

Service Manual

Remote Control Unit
WV-RC35

Pan/Tilt Head
WV-PH10

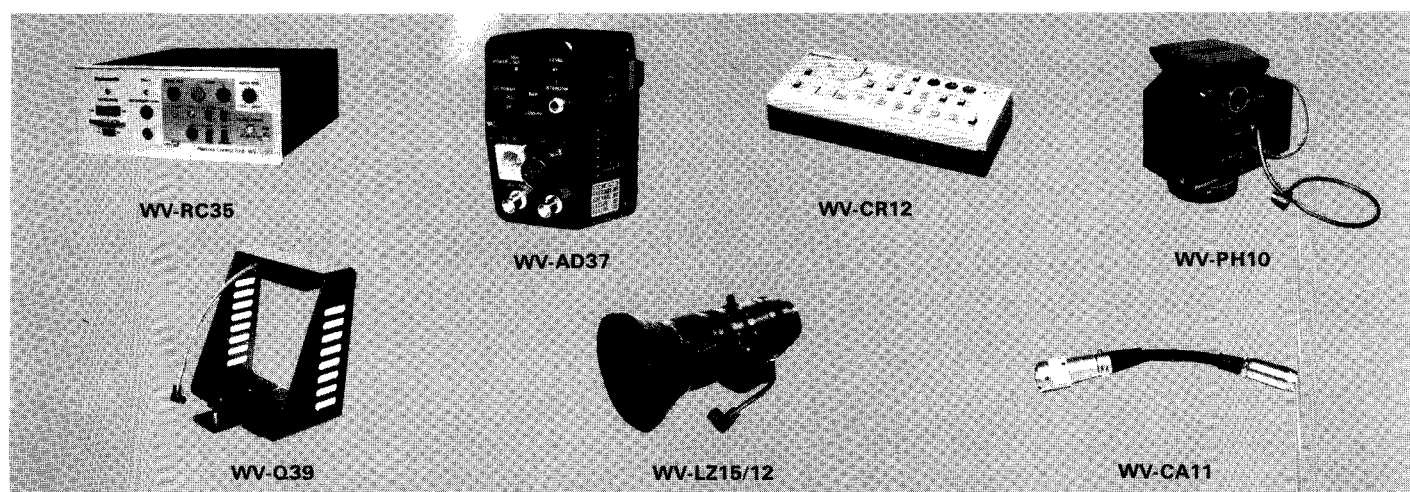
RCU Adaptor
WV-AD37

Mounting Bracket
WV-Q39

Camera Remote Controller
WV-CR12

12× Studio Zoom Lens
WV-LZ15/12

10P-14P Conversion Cable
WV-CA11



CONTENTS

SAFETY PRECAUTION	2	LOCATION OF TEST POINTS AND	
CIRCUIT DESCRIPTION		ADJUSTING CONTROLS	16
Remote Control Unit (RCU) WV-RC35	3	CABLE INFORMATION	17
Camera Remote Controller WV-CR12	5	BLOCK DIAGRAM	
RCU Adaptor WV-AD37	5	Remote Control Unit (RCU) WV-RC35	18
Pan/Tilt Head WV-PH10	7	RCU Adaptor WV-AD37	19
ADJUSTMENT PROCEDURE		Camera Remote Controller WV-CR12	20
1. Test Equipment Required	8	SCHEMATIC DIAGRAM	
2. Disassembling Procedure for Adjustment	8	Remote Control Unit (RCU) WV-RC35	21
Remote Control Unit (RCU) WV-RC35	8	RCU Adaptor WV-AD37	24
RCU Adaptor WV-AD37	8	Camera Remote Controller WV-CR12	25
Camera Remote Controller WV-CR12	8	Pan/Tilt Head WV-PH10	27
Pan/Tilt Head WV-PH10	9	Mounting Bracket WV-Q39	27
3. Disassembly Procedure	10	CONDUCTOR VIEW	
Pan/Tilt Head WV-PH10	10	Remote Control Unit (RCU) WV-RC35	22
Mounting Bracket WV-Q39	11	RCU Adaptor WV-AD37	23
12X Automatic Iris Studio Zoom Lens		Camera Remote Controller WV-CR12	26
WV-LZ15/12	11	Pan/Tilt Head WV-PH10	27
4. Adjustment Procedure	12	Mounting Bracket WV-Q39	27
Remote Control Unit (RCU) WV-RC35	12	WIRING DIAGRAM	
RCU Adaptor WV-AD37	12	12X Automatic Iris Studio Zoom Lens WV-LZ15/12	28
Camera Remote Controller WV-CR12	15	REPLACEMENT PARTS LIST	29
Pan/Tilt Head WV-PH10	16	EXPLODED VIEW	44

SAFETY PRECAUTION

 CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN  CAUTION TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.
		This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are shaded on the schematic diagram and on the replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

Circuit Description

WV-RC35

The remote control unit WV-RC35 has following circuits.

Power Board

- + 17V Regulator Circuit

Main Board

- + 5V Regulator Circuit
- Video Signal Output Circuit
- Lineview Video Output Circuit
- V.Sync Separation Circuit
- Gen-Lock Output Circuit
- Microprocessor Circuit
- Intercom Amplifier Circuit

Power Board

- + 17V Regulator Circuit

This circuit is composed of IC1, Q2 and Q3 on the power board and a power transistor Q1.

Approx. 22V AC obtained at secondary winding is rectified by D1 and approx. +30V DC is generated.

The + 30V DC is switched by the power transistor Q1 and D2. As a result, regulated + 17V DC is generated and it is fed to the AC/DC selection switch.

The switching frequency is approx. 100KHz which is set by C4 and R6 EXT DC voltage (12V ~ 20V) is supplied to CN2 (EXT DC INPUT).

Main Board

- + 5V Regulator Circuit

This circuit is composed of Q46 and Q47 and + 5V DC is generated from the regulated + 9V DC.

- Video Signal Output Circuit

This circuit is composed of Q1 ~ Q13 and a VBS signal from the camera head through the RCU adaptor WV-AD37 is amplified to compensate the cable loss and fed to the video output connectors.

- Lineview Video Output Circuit

This circuit is composed of Q20 ~ Q28 and a lineview video signal (VBS) fed to the AUX INPUT connectors is amplified to compensate the cable loss and fed to the camera head through a studio cable and RCU adaptor.

- V.Sync Separation Circuit

This circuit is composed of Q15 ~ Q19 and the V.sync signal of the video (VBS) signal from the camera head is separated and fed to the microprocessor circuit as a reference signal for the serial data transmission.

The composite sync signal of the VBS is detected by Q14 and amplified by Q15. The V.sync signal is detected from the composite sync signal by an integrator R54 and C19.

A waveform shaper Q16 and Q17 makes V.sync signal sharp.

The negative polarity V.sync signal is fed to the base of Q41.

- Gen-Lock Output Circuit

This circuit is composed of Q29 ~ Q34 and the gen-lock signal (black burst or composite video (VBS) signal) is phase-shifted by Q29 and VR6 (SC PHASE FINE) on the Control board and amplified by Q31 ~ Q34.

The gen-lock signal is then sent to the camera head through RCU adaptor.

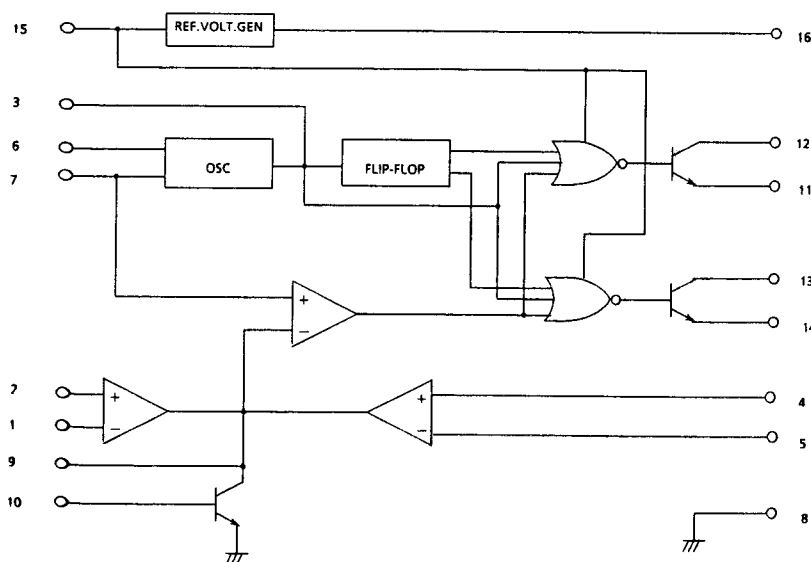


Fig. 1 Block Diagram of IC1

● Microprocessor Circuit

This circuit is composed of IC1 ~ IC3, IC6, Q40 ~ Q43.

This circuit sends the 8 times of 8 bit data to the camera head as a serial data at the rate of 8 bits per 1Vs period.

The block diagram is shown below.

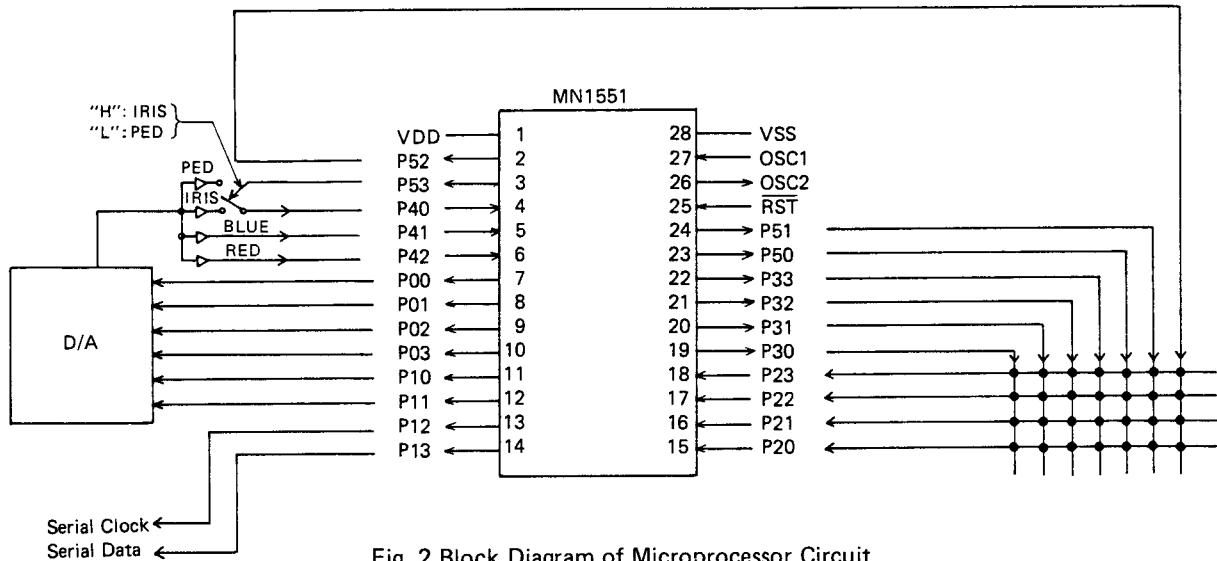


Fig. 2 Block Diagram of Microprocessor Circuit

The pin identification of IC1 (MN1551CVT3S)

Pin No.	Name	In/Out	Description
1	V _{DD}	IN	Power
2	P52	OUT	Key scan out
3	P53	OUT	Iris (H)/Pedestal (L)
4	P40	IN	Iris or Pedestal (H - up)
5	P41	IN	Blue Gain (H - up)
6	P42	IN	Red Gain (H - up)
7	P00	OUT	Iris R.B Gain DA0 (LSB)
8	P01	OUT	Iris R.B Gain DA1
9	P02	OUT	Iris R.B Gain DA2
10	P03	OUT	Iris R.B Gain DA3
11	P10	OUT	Iris R.B Gain DA4
12	P11	OUT	Iris R.B Gain DA5 (MSB)
13	P12	OUT	Serial Clock
14	P13	OUT	Serial Data
15	P20	IN	Key scan in
16	P21	IN	Key scan in
17	P22	IN	Key scan in
18	P23	IN	Key scan in
19	P30	OUT	Key scan out
20	P31	OUT	Key scan out
21	P32	OUT	Key scan out
22	P33	OUT	Key scan out
23	P50	OUT	Key scan out
24	P51	OUT	Key scan out
25	R _{ST}	IN	Reset pulse
26	OSC2	OUT	Clock oscillator
27	OSC1	IN	Clock oscillator
28	V _{SS}	IN	Ground

IN OUT	P23	P22	P21	P20
P30	AWC SET	FADE	REC · REV	NEGA · POSI SLOW
P31	COLOR BAR /CAMERA ON=BAR OFF=CAMERA	STANDBY /ON ON=STANDBY OFF=ON	AWC/ATW ON=ATW OFF=AWC	REC/PLAY ON=PLAY OFF=REC
P32	REC START/STOP	DATE · TIME ON/OFF (SHIFT) REV	TITLE ON/OFF (SEQ) CUE	(SET START/STOP) PLAY/STILL
P33	FOCUS SPEED ON=FAST OFF=SLOW	SW LOCK ON=LOCK OFF=FREE	TIME LAPS ON/OFF	TALLY LIGHT OFF=ON AIR
P50	FOCUS AUTO/MANU ON=AUTO OFF=MANU	AF ONE SHOT AREA SIZE	PAN · TILT /FOCUS · ZOOM ON=PAN · TILT OFF=FOCUS · ZOOM	PLAY BACK ON=PLAY BACK
P51	PAN RIGHT ZOOM WIDE	PAN LEFT ZOOM TELE	TILT DOWN FOCUS FAR	TILT UP FOCUS NEAR
P52	ZOOM SPEED ON=FAST OFF=SLOW	TIME LAPS MODE SW ON=LAPS	Vsync (ON(L) OFF(H))	VTR (CR12) / (CAMERA) ON=(CR1 2) OFF=(CAMERA)

Fig. 3 Input Matrix Circuit

- **Intercom Amplifier Circuit**

This circuit is composed of IC4, IC5, Q36 ~ Q39.

IC4 is the amplifier for the speaker of the head set connected to the RCU adaptor WV-AD37.

IC5 is the amplifier for the talk signal which is fed to SEG (Special Effect Generator).

WV-CR12

The camera remote controller WV-CR12 has following circuits.

- Video Output Circuit
- AF Area and EVF Character Signal Circuit
- Zebra and Vp Signal Circuit
- Microprocessor Circuit

- **Video Output Circuit**

This circuit is composed of Q4 ~ Q25 and Q66 and receives composite video signal (VBS) of camera head or playback video signal from the VTR and feeds it to the VTR connector and monitor output connector together with level indicator (zebra) and character signals.

The VBS signal from pin 1 of CN9 is amplified by Q4 ~ Q13, Q15, Q17, Q18 to compensate the cable loss.

The gain (Q11 ~ Q13) and frequency response (Q5, Q7 ~ Q10) is selected by SW1 (CABLE LENGTH COMPENSATION SWITCH).

Q20 detects the playback DC voltage multiplexed on the playback video signal from the VTR and cuts off Q15, Q17, Q18 and playback video signal from pin 1 of CN9 is amplified by Q21 ~ Q25 and supplied to the monitor output.

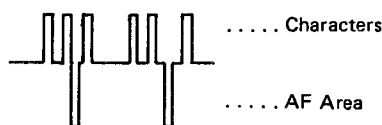
The zebra and character signals are mixed to the video signal at the emitter of Q22.

- **AF Area and EVF Character Signal Circuit**

This circuit is composed of Q26 ~ Q35, Q45 ~ Q50 and receives AF area and character signals from the camera head and feeds them to the video output circuit to mix them with the composite video signal for monitor output.

The AF area and character signal from pin 6 of CN9 is amplified by Q26 ~ Q35 as well as the composite video signal.

The waveform at TP4 (AREA) is shown below.

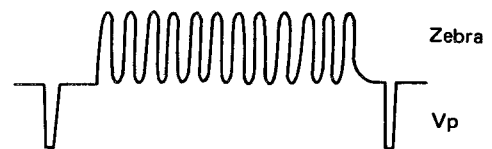


Q47 and Q48 pass the character signal and Q49 and Q50 pass the AF area signal.

The AF area signal is then switched ON/OFF by the SW22 (AF ZONE ON/OFF SWITCH).

- **Zebra and Vp Signal Circuit**

This circuit is composed of Q36~Q44 & Q65 and receives the level indicator (zebra) & Vp (multiplexed) signal from the camera head and feeds the zebra signal to the video output circuit to mix it with the composite video signal for monitor output. This circuit also separates the Vp pulse and sends it to the microprocessor circuit as a reference signal of the serial data transmission.



The zebra&Vp signal from pin 5 of CN9 is amplified by Q36 ~ Q43 as well as the video output and AF area & character circuits. The zebra signal is then fed to the emitter of Q22 from the emitter of Q43 through IC1(b) (REC/P.B) and IC1(a) (STANDBY/ON). Q44 and Q65 separate the Vp signal by canceling the zebra signal and feed it to the microprocessor circuit.

- **Microprocessor Circuit**

This circuit is composed of IC1(c), IC2~IC4, IC6, Q51~Q54 and Q57~Q64 and make the serial data communication with the camera head, VTR and 8X auto-focus lens.

Please refer to page 1-44 and 1-45 of WV-3260/BAF series (NTSC) or WVP-F10 series (PAL) service manual for the pin identification of IC6 and page 3 of this manual for that of IC2.

WV-AD37

The RCU adaptor WV-AD37 has following circuits.

- Internal/External Selection Circuit
- Lineview Video Output Circuit
- H.Phase Control Circuit
- SC Phase Control Circuit
- Camera/RCU Selection Circuit
- Serial Data Output Circuit
- Serial Clock Output Circuit
- Sync Separation Circuit
- Burst Gate Circuit
- Color bar Signal Generator Circuit

- **Internal/External Selection Circuit**

This circuit is composed of Q19 and receives INT (Internal sync.: Low) or EXT (Gen-lock : High) signal from the camera head through pin 6 of CN9. The output of Q19 turns ON or OFF of the gen-lock indicator D2 and Q4 which is used for reducing a noise of sync separation circuit when no gen-lock signal is supplied.

- **Lineview Video Output Circuit**

This circuit is composed of Q20 and receives the lineview video signal from RCU and removes the chroma component of lineview video signal by CF4 and sends it to camera head.

- **H.Phase Control Circuit**

This circuit is composed of IC3, IC4(d) and Q18 and supplies the DC voltage of H.phase control for gen-lock mode from VR1 (H.PHASE for using RCU adaptor only) or that of from RCU through Q18. IC3 selects the RCU use(RCU) or without RCU(EXT) mode. IC4(d) is a DC amplifier for the H.phase control DC voltage.

- **SC Phase Control Circuit**

This circuit is composed of IC3, IC4(a),(b),(c) and supplies 2 bits control signal to the camera head.

IC4(a),(b) and (c) conform a window comparator and SC phase control DC voltage (analog signal) from SW1 & SW2 (SC PHASE COARSE-1 & 2) or from the RCU through IC3.

The 2 bits output signal obtained at pins 1 and 2 is fed to camera head through pins 1 & 4 of CN9.

- **Camera/RCU Selection Circuit**

This circuit is composed of Q134 and Q135 and receives RCU(High) or EXT(Low) selection signal from SW1 (POWER SELECTION SWITCH) and enables or disables the serial data output and serial clock output circuits.

- **Serial Data Output Circuit**

This circuit is composed of Q131~Q133 and amplifies/shapes the serial data signal.

- **Serial Clock Output Circuit**

This circuit is composed of Q113~Q115 and amplifies/shapes the serial clock signal as well as the serial data output circuit.

- **Sync Separation Circuit**

This circuit is composed of Q1~Q6 and generates composite sync signal by separating it from the gen-lock signal (black burst or composite video signal). The gen-lock sync signal obtained at the collector of Q6 is fed to the camera head through pin 8 of CN9.

- **Burst Gate Circuit**

This circuit is composed of Q7~Q9 and MAIN VIC BOARD and generates the gen-lock burst signal by separating it from the gen-lock signal and sends it to the camera head.

IC1 on the VIC board receives non-delayed burst signal from the emitter of Q10 to pin 8 of IC10 and amplifies it by the DC control voltage fed from the thermistor mounted on camera head through pin 9 of CN9 to pin 4 of IC1 on VIC board.

The amplified burst signal obtained at pin 12 of IC1 is mixed with 90° delayed burst signal at pin 2 of BPF CF3. By this mixing, the burst phase is compensated (maintained) from a temperature drift.

The burst signal obtained at pin 13 of IC2(a) is sent to the camera head through pin 11 of CN9.

- **Color bar Signal Generator Circuit**

This circuit is composed of IC101~IC103, IC105, IC106, Q101~Q112 & Q116~Q130 and generates composite color bar signal and send it to the camera head.

IC101(a) and (d) oscillate approx.130kHz pulse and feed it to pin 15 of IC102. IC102 generates following pulses.

Blue pulse — Pin 6

Red pulse — Pin 11

Green pulse — Pin14

The Y signal of color bar is generated at the base of Q104, R-Y signal at pin 7 and B-Y signal at pin 1 of IC103 are generated respectively.

The R-Y and B-Y signals are then mixed with burst flag pulse (BFP) fed from the emitters of Q126 & Q128 and supplied to balanced modulator IC106 pins 5 & 14.

The modulated chroma & burst signal mixed at the base of Q108 is then forwarded to the output amplifier of color bar signal consisting of Q105~Q110.

Q116~Q122 conform the phase shifter for generating R-Y subcarrier & B-Y subcarrier signals.

In the PAL model, the R-Y subcarrier signal is inverted by lines by IC105 pins 3,4 & 5.

WV-PH10

The Pan/Tilt head WV-PH10 has following circuits.

- Panning Motor Drive Circuit
- Tilting Motor Drive Circuit

- Panning Motor Drive Circuit

This circuit is composed of IC1, IC3, Q1, & Q3 and detects the direction of panning (LEFT/RIGHT) and supplies the drive current to the panning motor.

The IC1 conformes a window comparator and the panning control signal fed from pin 3 of CN1 is as follows.

LEFT Approx. 1~2 volts

RIGHT Approx. 3~4 volts

LEFT Pins 1 & 14 of IC1 — High

Pins 2 & 13 of IC1 — Low

Drive current — Pin 7 of IC3 — Pin 1 of CN3 —

PAN MOTOR — Pin 3 of CN3 — Pin 8 of IC3

RIGHT Vise versa of left

Q1 and Q3 control the drive current thus the motor speed is controlled.

- Tilting Motor Drive Circuit

This circuit functions same mannar as the panning motor drive circuit.

ADJUSTMENT PROCEDURE

1. Test Equipment Required

The following test equipment is required for adjustment of Remote Control Unit (RCU) model WV-RC35, RCU Adaptor model WV-AD37, Camera Remote Controller model WV-CR12 and Pan/Tilt Head model WV-PH10.

- o Oscilloscope
(dual trace, delayed sweep, 25MHz band width with three probes.)
- o Digital voltmeter (DVM)
- o Frequency counter
- o Vectorscope
- o Color video monitor
- o Tripod

2. Disassembly Procedure for Adjustment

2-1 Remote Control Unit WV-RC35

- o Remove four screws which hold the cover and remove the cover. (Fig. 2-1-1)

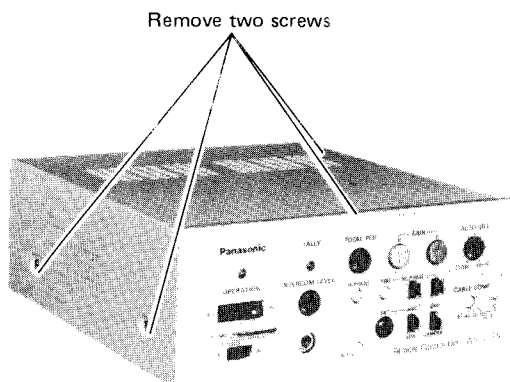


Fig. 2-1-1

2-2 RCU Adaptor WV-AD37

- o Remove four screws which hold the cover and remove the cover. (Fig. 2-2-1 and Fig. 2-2-2)

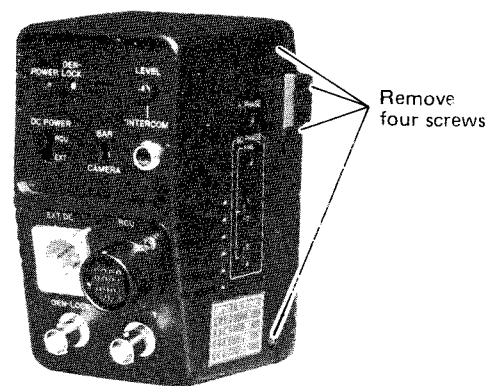


Fig. 2-2-1

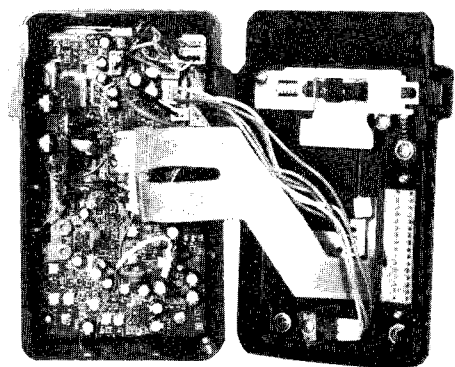


Fig. 2-2-2

2-3 Camera Remote Controller WV-CR12

- o Remove four screws which hold the cover and remove the cover. (Fig. 2-3-1 and Fig. 2-3-2)

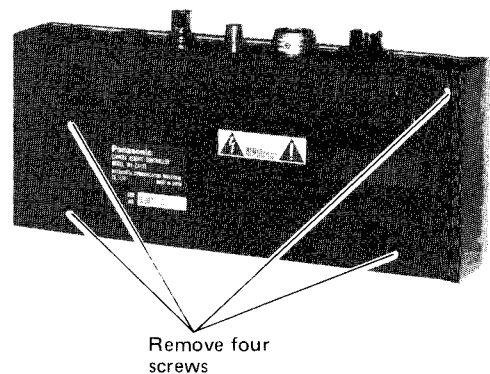


Fig. 2-3-1

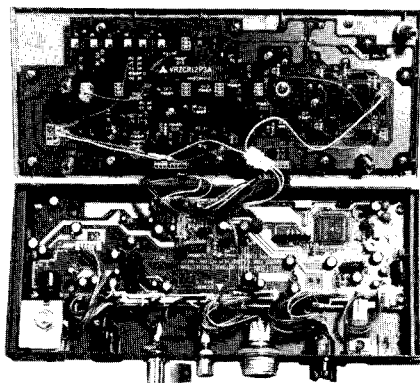
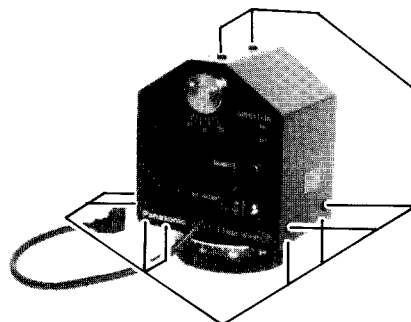


Fig. 2-3-2



Remove ten screws

Fig. 2-4-3

2-4 Pan/Tilt Head WV-PH10

- o Remove two screws which hold the decoration plate and remove the decoration plate. (Fig. 2-4-1)

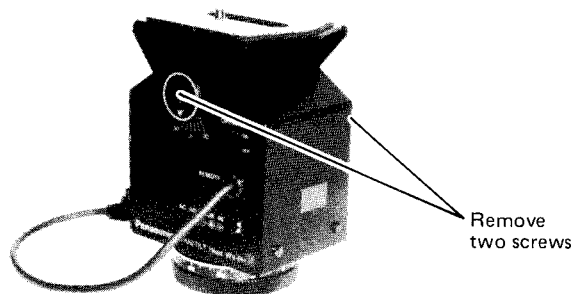
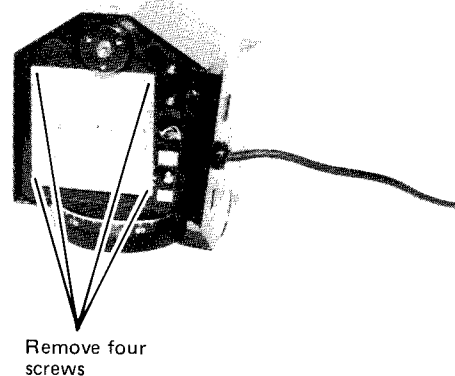


Fig. 2-4-1

- o Remove the control board by removing four fixing screws. (Fig. 2-4-4 and Fig. 2-4-5)



Remove four screws

Fig. 2-4-4

- o Remove six screws which hold the camera stand and remove the camera stand. (Fig. 2-4-2)

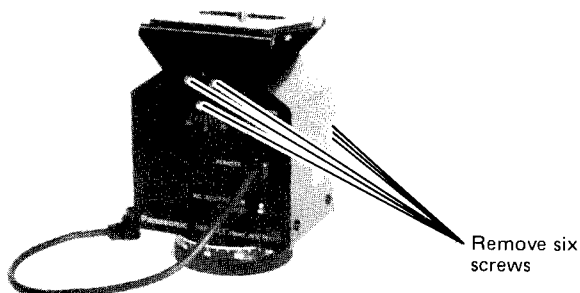
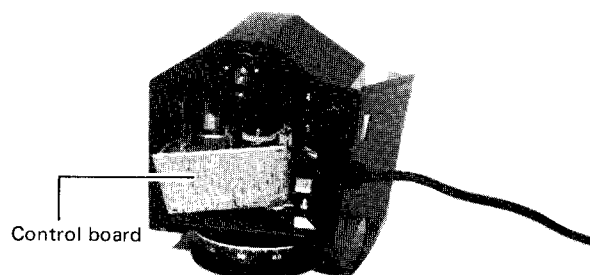


Fig. 2-4-2



Control board

Fig. 2-4-5

- o Remove ten screws which hold the cover and remove the cover. (Fig. 2-4-3)

3. Disassembly Procedure

3-1 Pan/Tilt Head WV-PH10

- o See Fig. 2-4-1 on page 9.
- o See Fig. 2-4-2 on page 9.
- o See Fig. 2-4-3 on page 9.
- o See Fig. 2-4-4 on page 9.

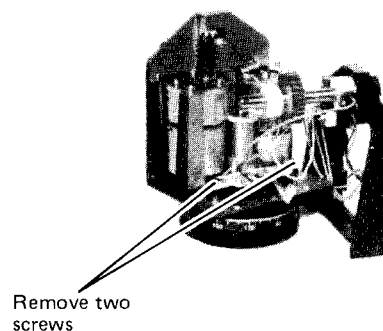


Fig. 3-1-3

- o Remove the tilting motor unit by removing three fixing screws. (Fig. 3-1-4)

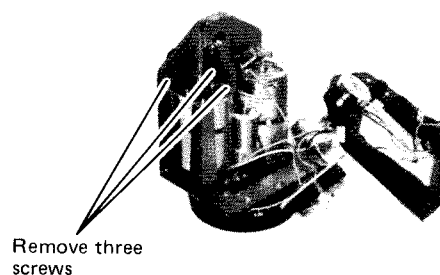


Fig. 3-1-4

- o Remove two screws fixing the flange and T cam using hexa wrench and remove two screws fixing the side plate and remove the flange and side plate. (Fig. 3-1-1 and Fig. 3-1-2)

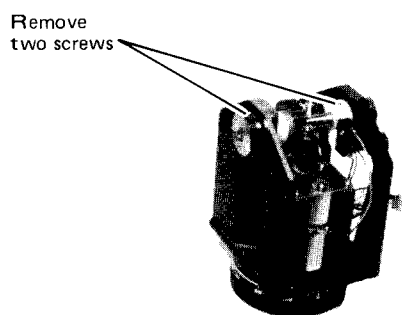


Fig. 3-1-1

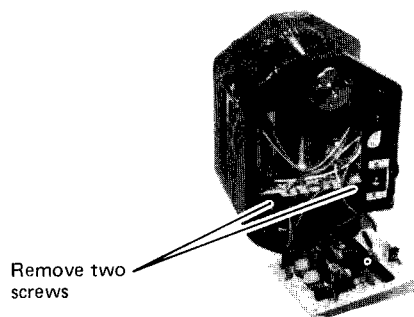


Fig. 3-1-2

- o Remove the panning main shaft base assy by removing fixing screws. (Fig. 3-1-5)

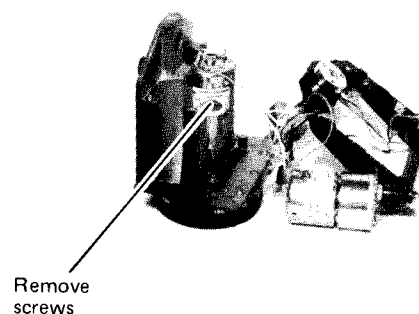


Fig. 3-1-5

- o Remove the panning motor unit by removing three fixing screws. (Fig. 3-1-6)

- o Remove the switch board by removing two fixing screws. (Fig. 3-1-3)

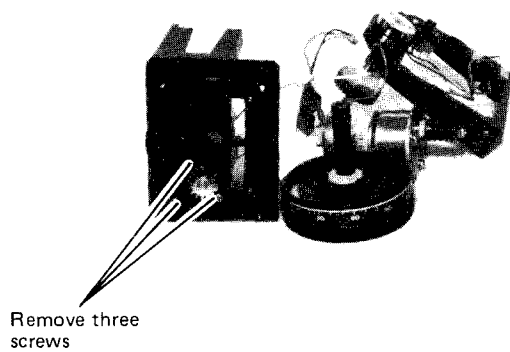


Fig. 3-1-6

3-2 Mounting Bracket WV-Q39

- o Remove four screws which hold the cover and remove the cover. (Fig. 3-2-1)

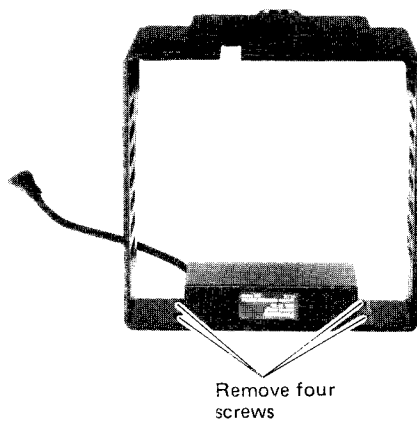


Fig. 3-2-1

- o Remove two screws which hold the buffer board and remove the buffer board. (Fig. 3-2-2)

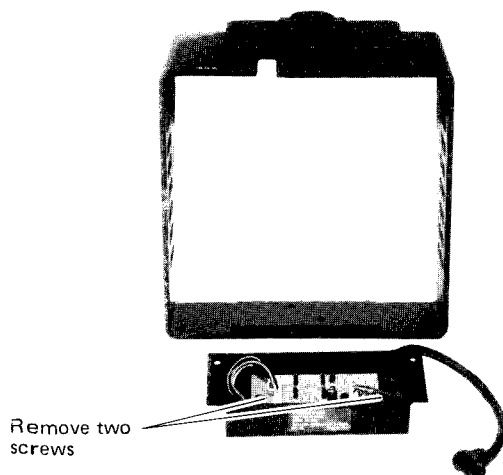


Fig. 3-2-2

3-3 12X Automatic Iris Studio Zoom Lens WV-LZ15/12

- o Disconnect the lens connector from the camera.
- o Remove the lens hood by turning it counterclockwise.
- o Remove four screws which hold the Iris Cover. (Fig. 3-3-1)

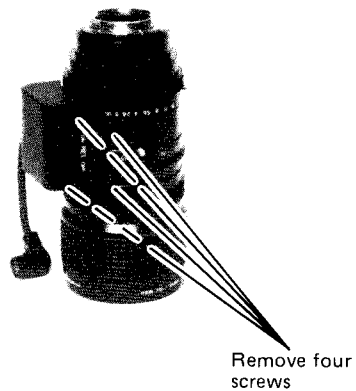


Fig. 3-3-1

- o Remove two screws which hold the Iris Switch. (Fig. 3-3-2 and Fig. 3-3-3)

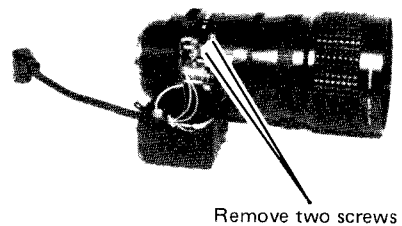


Fig. 3-3-2



Fig. 3-3-3

4. Adjustment Procedure

4-1 Remote Control Unit (RCU) WV-RC35 Adjustment

- o Disassemble the Remote Control Unit (RCU) while referring to 2-1 Remote Control Unit WV-RC35 on page 8.
- o Refer to page 16 for the test points and adjusting controls.

(a) +17V adjustment

Test point:	TP2 (+17V) Power board
Adjust:	VR1 (+17V ADJ) Power board

- o Connect the digital voltmeter (DVM) probe between TP2 (+17V) and TP3 (GND) ground.
- o Adjust VR1(+17V ADJ) for $+17V \pm 0.05V$

(b) +5V adjustment

Test point:	TP1 (+5V) Main board
Adjust:	VR1 (+5V ADJ) Main board

- o Connect the digital voltmeter (DVM) probe between TP1 (+5V) on the Main board and TP3 (GND) ground on the Power board.
- o Adjust VR1(+5V ADJ) for $+5V \pm 0.05V$

4-2 RCU Adaptor WV-AD37 Adjustment

- o Disassemble the RCU Adaptor WV-AD37 while referring to 2-2 RCU Adaptor WV-AD37 on page 8.
- o Refer to page 16 for the test points and adjusting controls.

(a) Connection and setting up for adjustment

Connection

- o Mount the RCU Adaptor WV-AD37 on the camera while connecting the 32-pin junction connector on the camera and the RCU adaptor.
- o Connect the RCU Adaptor WV-AD37 and RCU using a 30ft (10m) 14-pin studio cable (14C-30).
- o Connect the VIDEO OUTPUT connector on the RCU to the VIDEO INPUT connector of color monitor through the vectorscope using a coaxial cable.
- o Terminate the video input of color monitor with 75 ohms.

Position of controls and switches on the camera, RCU and RCU Adaptor

(Camera)

- Right Side -

[Control Board]

Standby switch (SW1) : Right (ON) position
AGC selection switch (SW2) : Center (LOW) position

[Power/Sync Board]

Level indicator switch (SW3) : Upper (ON) position
(NTSC only)
H.blanking width switch (SW2) : Upper (1, 10.9 μ sec) position
V.blanking width switch (SW1) : Upper (1, 20H) position

- Left Side -

[Audio Board]

DC power selection switch (SW2) : Left (EXT) position

- Rear Side -

[Mother Board]

VTR compatibility switch (SW1) : Upper (⊕) position

(RCU)

Total pedestal control : Mechanical center position
Red gain control : Mechanical center position
Blue gain control : Mechanical center position
Auto Iris control : Mechanical center position
Cable length compensation switch : 10m (30ft)
Color Bar/Camera Selection switch : Upper (BAR) position

(RCU Adaptor)

DC Power Selection Switch : Upper (RCU) position

- o The camera must be completely aligned before RCU adjustment is made.

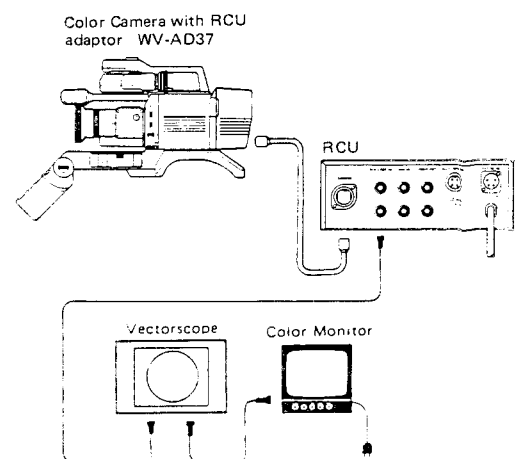


Fig. 4-2-1

(b) Color bar width adjustment

Test point:	Video Output Connector
Adjust:	VR101 (C/B WIDTH) Main board

- o Connect the oscilloscope to Video Output Connector on the rear of the RCU adaptor.
- o Adjust VR101 (C/B WIDTH) on the Main board so tht the black of color bar width is $5.4 \mu\text{sec} \pm 0.1 \mu\text{sec}$. (Fig. 4-2-2)

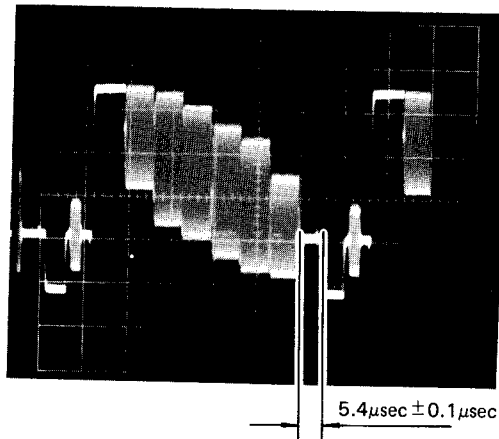
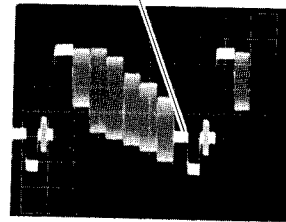
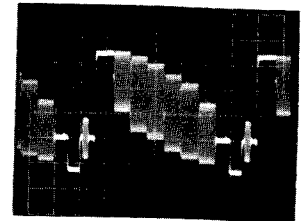


Fig. 4-2-2

Minimize the carrier



NO GOOD

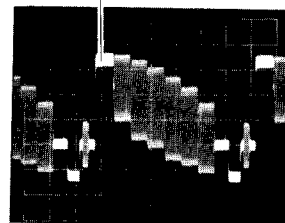


GOOD

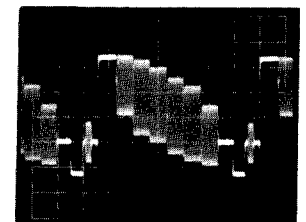
Fig. 4-2-3

- o Adjust VR111 (C/B B-Y_L WHITE BAL) and VR102 (C/B R-Y_L WHITE BAL) on the Main board alternately so that the carrier on the white level of video signal becomes minimum. (Fig. 4-2-4)

Minimize the carrier



NO GOOD



GOOD

Fig. 4-2-4

(c) Carrier balance and white balance adjustment

Test point:	Video Output Connector
Adjusts:	VR102 (C/B R-Y _L WHITE BAL) Main board
	VR111 (C/B B-Y _L WHITE BAL) Main board
	VR106 (C/B B-Y _L CARRIER BAL) Main board
	VR107 (C/B R-Y _L CARRIER BAL) Main board

- o Observe the oscilloscope to the terminated Video Output Connector.
- o Adjust VR106 (C/B B-Y_L CARRIER BAL) and VR107 (C/B B-Y_L CARRIER BAL) on the Main board alternately so that the carrier on the black level of video signal becomes minimum. (Fig. 4-2-3)

(d) Chroma and Burst adjustment

Test point:	Video output connector	
Adjusts:	VR108	Main board
	(R-Y/B-Y BALANCE)	
	VR109	Main board
	(C/B CHROMA GAIN)	
	CT1	Main board
	(SC 90° PHASE)	
	VR104	Main board
	(BURST PHASE)	
	VR105	Main board
	(BURST GAIN)	
	[PAL only]	
	VR103	Main board
	(SC R BALANCE)	
	CT2	Main board
	(SC 270° PHASE)	

[Adjustment for NTSC model]

- o Observe the vectorscope.
- o Set the gain switch of the vectorscope to 75%.
- o Turn the phase control of vectorscope so that the burst vector aligns with the burst axis of the vectorscope.
- o Adjust VR104 (BURST PHASE) so that the all vectors fall into their respective boxes on the vectorscope.(Fig. 4-2-5)
- o Set the gain control of vectorscope to the calibration position.
- o Adjust VR108 (R-Y/B-Y BALANCE), VR109 (C/B CHROMA GAIN) and CT1 (SC 90° PHASE) so that the all vectors fall into their respective boxes on the vectorscope. (Fig. 4-2-5)

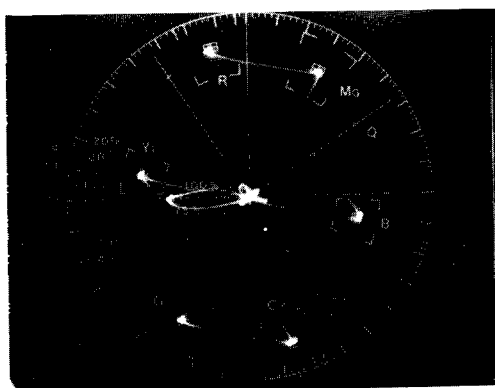


Fig. 4-2-5

- o Repeat adjusting above steps until all vectors fall into their respective boxes on the vectorscope.
- o Adjust VR105 (BURST GAIN) so that the burst vector aligns on the burst axes, its amplitude is at 75% position and other vectors fall into their respective boxes on the vectorscope. (Fig. 4-2-6)

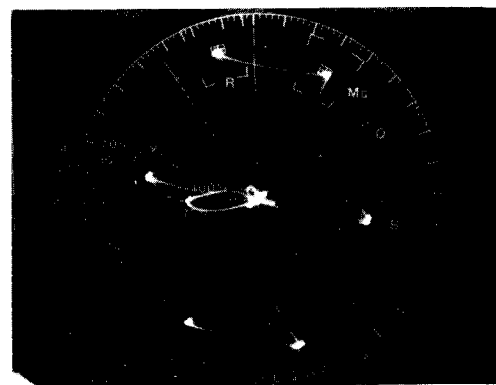


Fig. 4-2-6

[Adjustment for PAL model]

- o Observe the vectorscope.
- o Set the gain switch of the vectorscope to 75%.
- o Adjust VR104 (BURST PHASE) and the phase control of vectorscope so that the burst vectors position on the burst axes on the vectorscope. (Fig. 4-2-7)

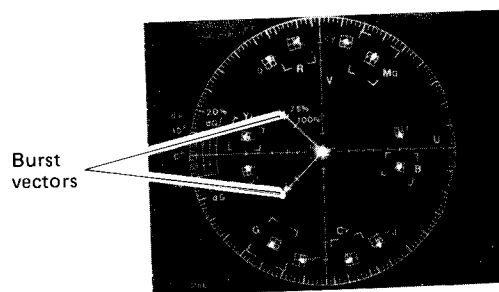


Fig. 4-2-7

- o Adjust VR108 (R-Y/B-Y BALANCE), VR109 (C/B CHROMA GAIN), CT1 (SC 90° PHASE), VR103 (SC R BALANCE) and CT1 (SC 270° PHASE) so that the all vectors fall into their respective boxes on the vectorscope. (Fig. 4-2-8)

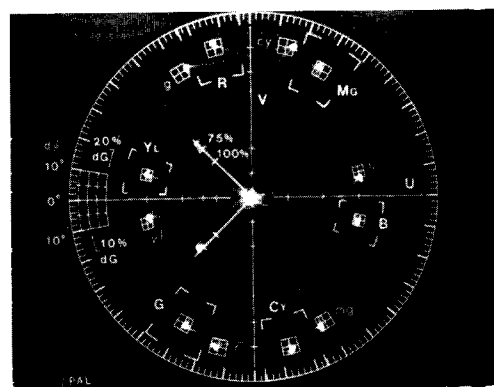


Fig. 4-2-8

- o Repeat adjusting above steps until all vectors fall into their respective boxes on the vectorscope.
- o Adjust VR105 (BURST GAIN) so that the burst vectors align on the burst axes, their amplitude are at 75% position and other vectors fall into their respective boxes on the vectorscope. (Fig. 4-2-9)

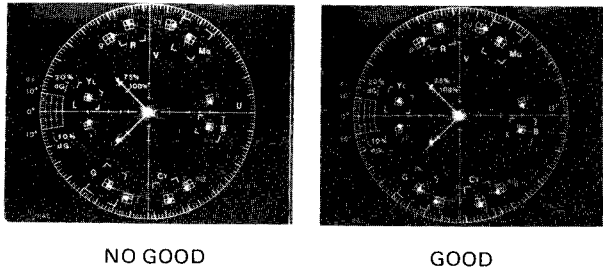


Fig. 4-2-9

4-3 Camera Remote Controller WV-CR12 Adjustment

- o Disassemble the Camera remote Controller WV-CR12 while referring to 2-3 Camera Remote Controller WV-CR12 on page 8 and 9
- o Refer to page 17 for the test points and adjusting controls.

(a) Connection:

- o Install the 1" viewfinder on the camera remote controller and connect the viewfinder connector to the EVF Connector on the Camera Remote Controller.
- o Connect the control cable between the EVF/Camera Remote Connector on the camera and the Camera Connector on the Camera Remote Controller.
- o Connect the Monitor Output Connector on the Camera Remote Controller to the Video Input Connector of Color Monitor using a coaxial cable.
- o Connect the camera cable from the Power Supply to the camera. (Fig. 4-3-1)

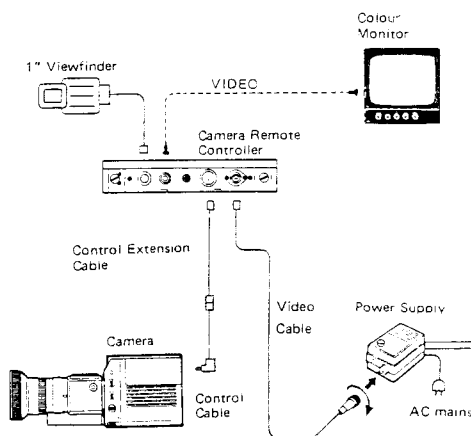


Fig. 4-3-1

(b) +5V adjustment

Test point:	TP2 (+5V)	CR Main board
Adjust:	VR1 (+5V ADJ)	CR Main board

- o Connect the digital voltmeter (DVM) Probe between TP2 (+5V) and TP3 (GND) ground.
- o Adjust VR1 (+5V ADJ) for $+5.0V \pm 0.05V$.

(c) Timer frequency adjustment

Test point:	TP5 (TIMER FREQ)	CR Main board
Adjust:	CT1 (TIMER FREQ ADJ)	CR Main board

- o Connect the frequency counter to TP5 (TIMER FREQ) and TP3 (GND) ground.
- o Adjust CT1 (TIMER FREQ ADJ) for $32.768KHz \pm 0.03KHz$.

4-4 Pan/Tilt Head WV-PH10 Adjustment

- o Disassemble the Pan/Tilt Head WV-PH10 while referring to 2-4 Pan/Tilt Head WV-PH10 on page 2.
- o Refer to page 17 for the test points and adjusting controls.

(a) Connection and setting up for adjustment

Connection:

- o Install the 1" viewfinder on the camera remote controller and connect the viewfinder connector to the EVF Connector on the Camera Remote Controller.
- o Connect the control cable between the EVF/Camera Remote Connector on the camera and the Camera Connector on the Camera Remote Controller.
- o Connect the Monitor Output Connector on the Camera Remote Controller to the Video Input Connector of Color Monitor using a coaxial cable.
- o Connect the remote control cable/connector on the pan/tilt head to the 5-pin Pan/Tilt Connector on the camera.

Position of switch on the Camera Remote Controller and Pan/Tilt Head

(Camera Remote Controller)

Operation Switch _____ ON
 Lock Switch _____ OFF
 Pan/Tilt-Lens Selection Switch _____ Pan/Tilt

(Pan/Tilt Head)

Operation Switch _____ ON

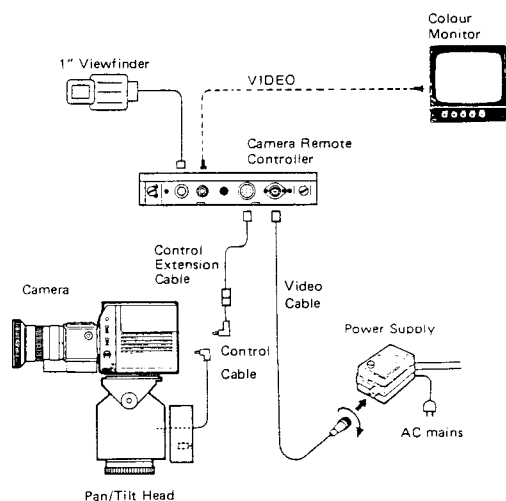


Fig. 4-4-1

(b) Panning speed adjustment

Test point:	Pin 7 of IC3	Control board
Adjust:	VR1	Control board
(PANNING SPEED SET)		

- o Connect the digital voltmeter (DVM) probe between pin 7 of IC3 and pin 4 of CN1 (ground).
- o Press the LEFT switch on the Camera Remote Controller until the Pan/Tilt head stops at the left end.
- o Adjust VR1 (PANNING SPEED SET) for $+5.1V \pm 0.01V$.

(c) Tilting speed adjustment

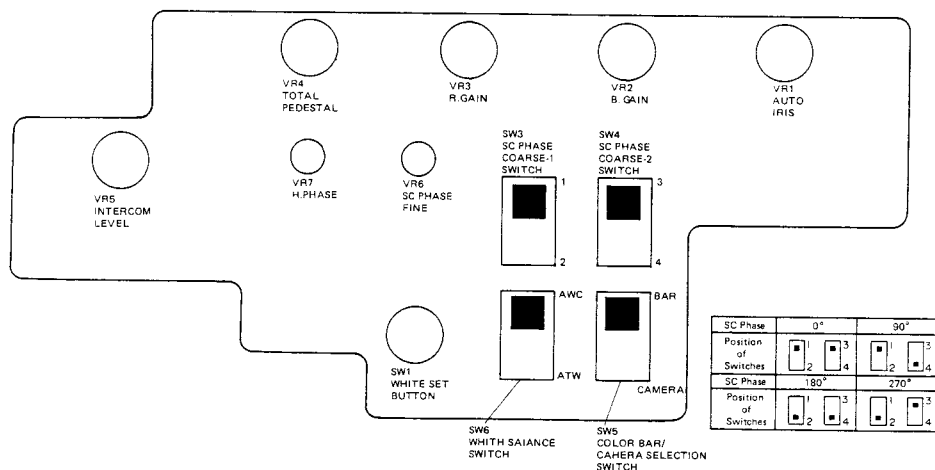
Test point:	Pin 7 of IC4	Control board
Adjust:	VR2	Control board
(TILTING SPEED SET)		

- o Connect the digital voltmeter (DVM) probe between pin 7 of IC4 and pin 4 of CN1 (ground).
- o Press the UP switch on the Camera Remote Controller until the Pan/Tilt head stops at the upper end.
- o Adjust VR2 (TILTING SPEED SET) for $+5.1V \pm 0.01V$.

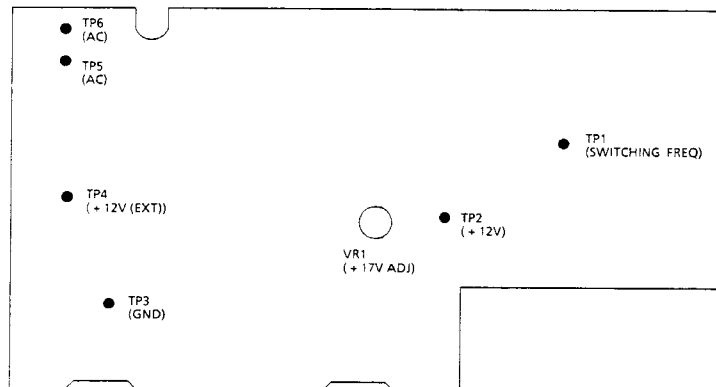
LOCATION OF TEST POINTS AND ADJUSTING CONTROLS REMOTE CONTROL UNIT (RCU) WV-RC35

CONTROL BOARD

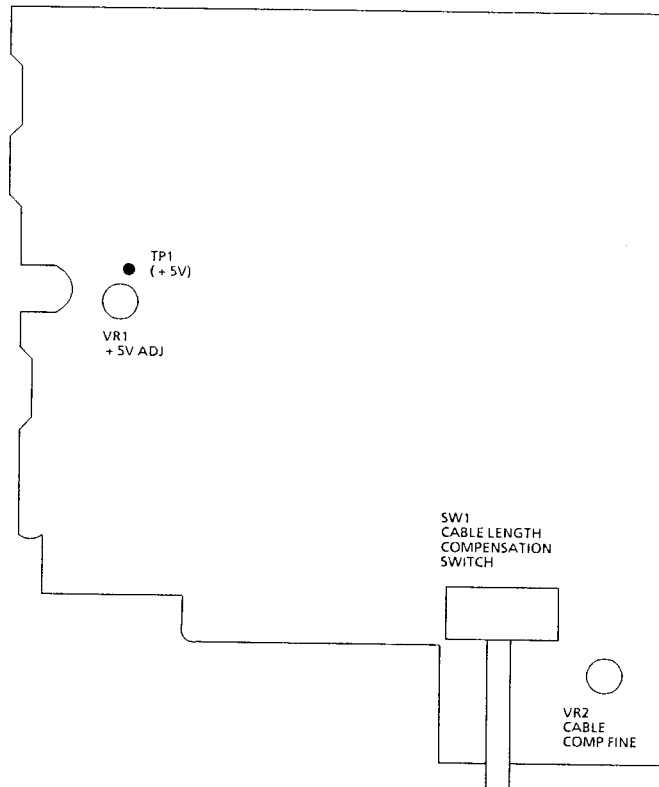
— Component Side —



POWER BOARD



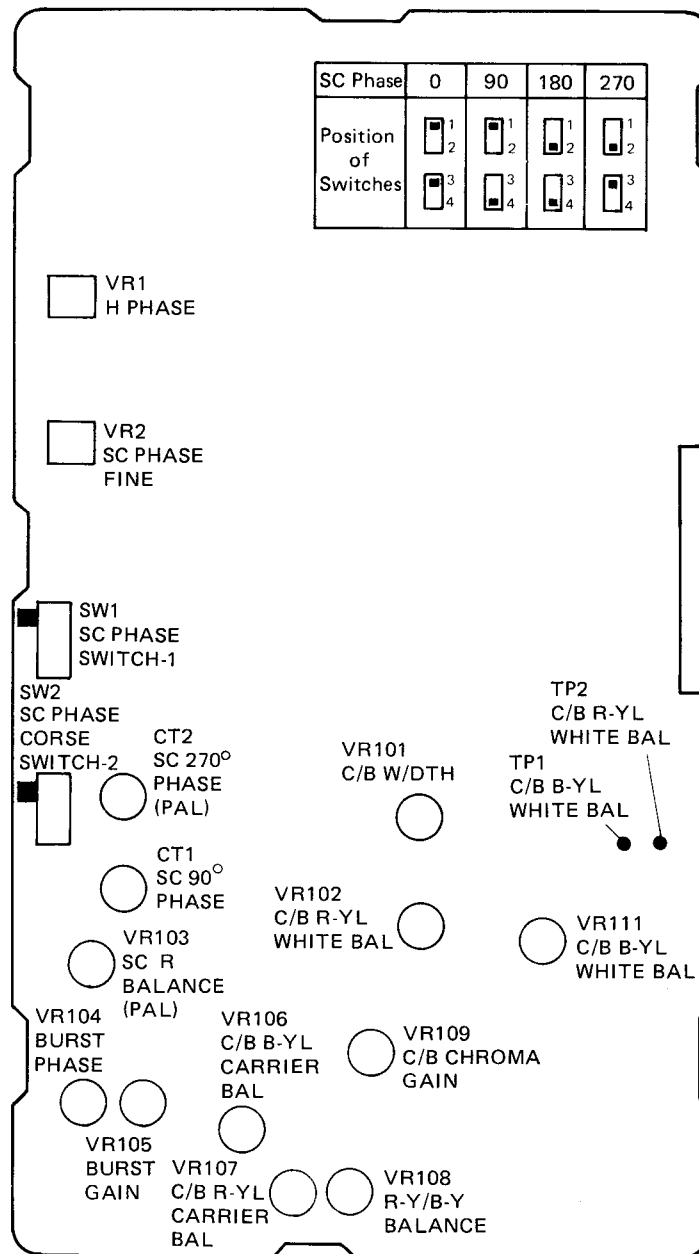
MAIN BOARD



RCU ADAPTOR WV-AD37

— Component Side —

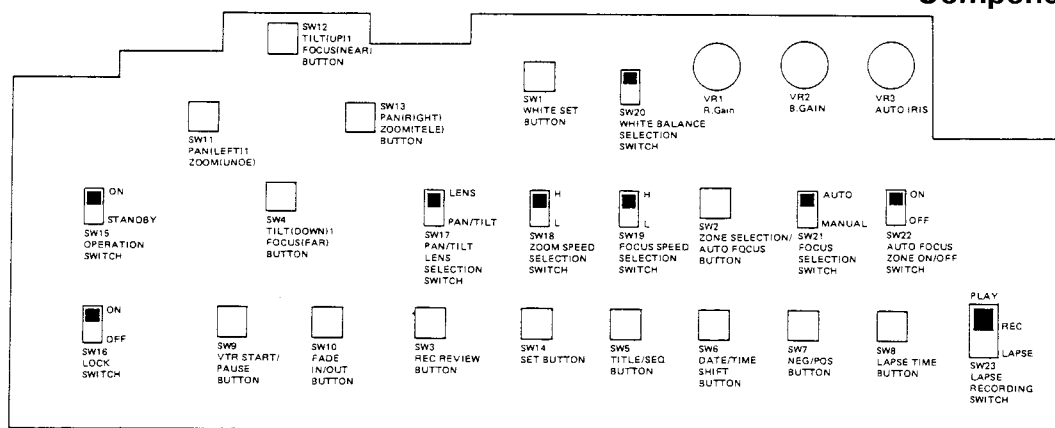
MAIN BOARD



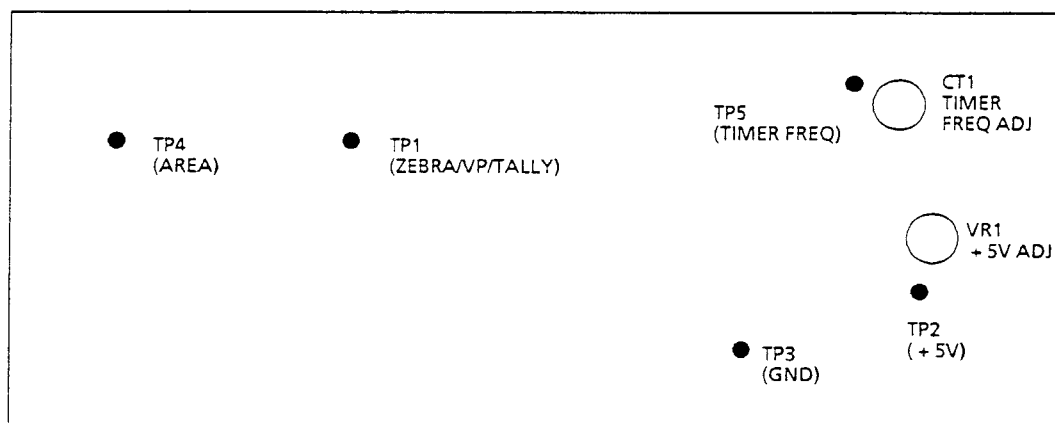
CAMERA REMOTO CONTROLLER WV-CR12

CONTROL BOARD

— Component Side —

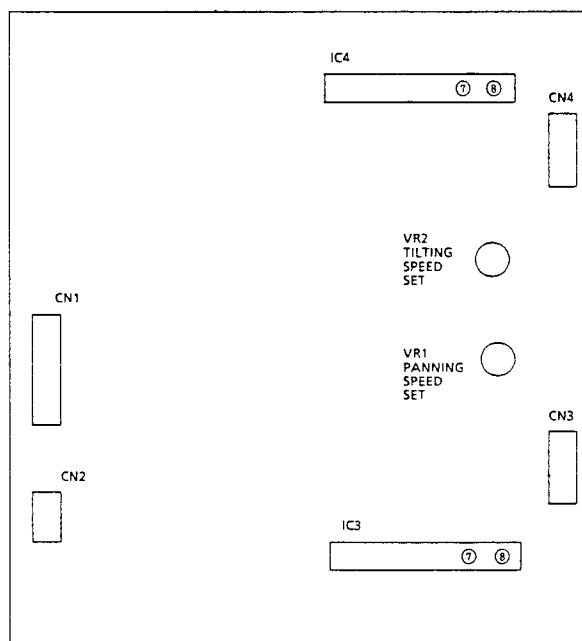


MAIN BOARD



PAN/TILT HAED WV-PH10

CONTROL BOARD

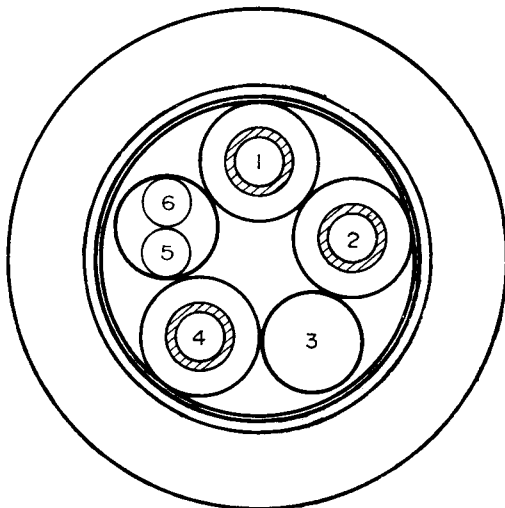


CABLE INFORMATION

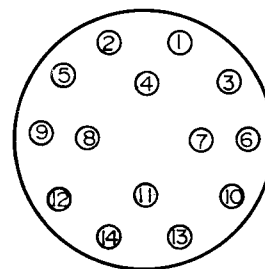
CONTROL CABLE

14 Pin Connector Pin No.	Wire No.	Signal				Connection		10 Pin Connector Pin No.
			UL No.	Product Description	AWG Size	14 Pin Side	10 Pin Side	
2	3	+12V	1571	*1	16			10
3	2	AUDIO (L)	1571	COXIAL CABLE	24			7
4&5		AUDIO GROUND	1571		22			8
6	1	VIDEO	1631	COXIAL CABLE	28			1
7		VIDEO GROUND	1631		22			2
14	5	STANDBY/L CH	1061	*2	26			5
1	—	GROUND	—	SHIELD CABLE	20			6
13	6	REC START/PAUSE CONT	1061	*2	26			4
8		NOT USED						6
9		NOT USED						3
10		NOT USED						
11		NOT USED						
12		NOT USED						

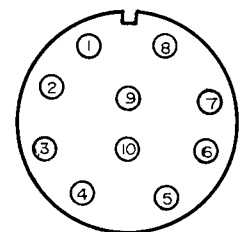
NOTE : *1 Tinned Copper, vinyl insulated, conductors cable
: *2 2 Conductors shield cable.



Section of Cable



14P Connector

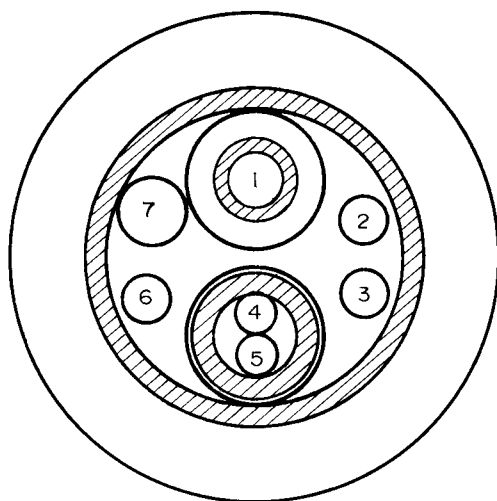


10P Connector

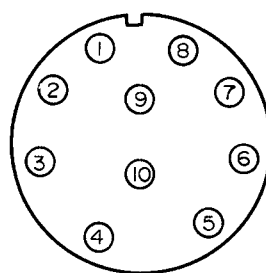
WV-CA11

10 Pin Connector No.	Wire No.	Signal	UL No.	Product Description	AWG No.	10 Pin Connector No.
1	1	VIDEO	1631	COXIAL CABLE	28	1
2		VIDEO GROUND				2
3	2	SERIAL DATA	1571	*1	28	3
4	3	SERIAL CLOCK	1571	*1	28	4
5	4	STANDBY/L CH	1571	*2	28	5
6	6	REC START/ PAUSE CONT	1571	*1	28	6
7	5	AUDIO (L)	1571	*2	28	7
8		AUDIO GROUND				8
9		GROUND		SHIELD CABLE		9
10	7	+12V	1571	*1	24	10

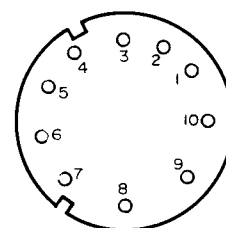
NOTE : *1 Tinned Copper, vinyl Insulated, Conductors Cabled.
: *2 2 Conductors Shild Cabled.



Section of Cable

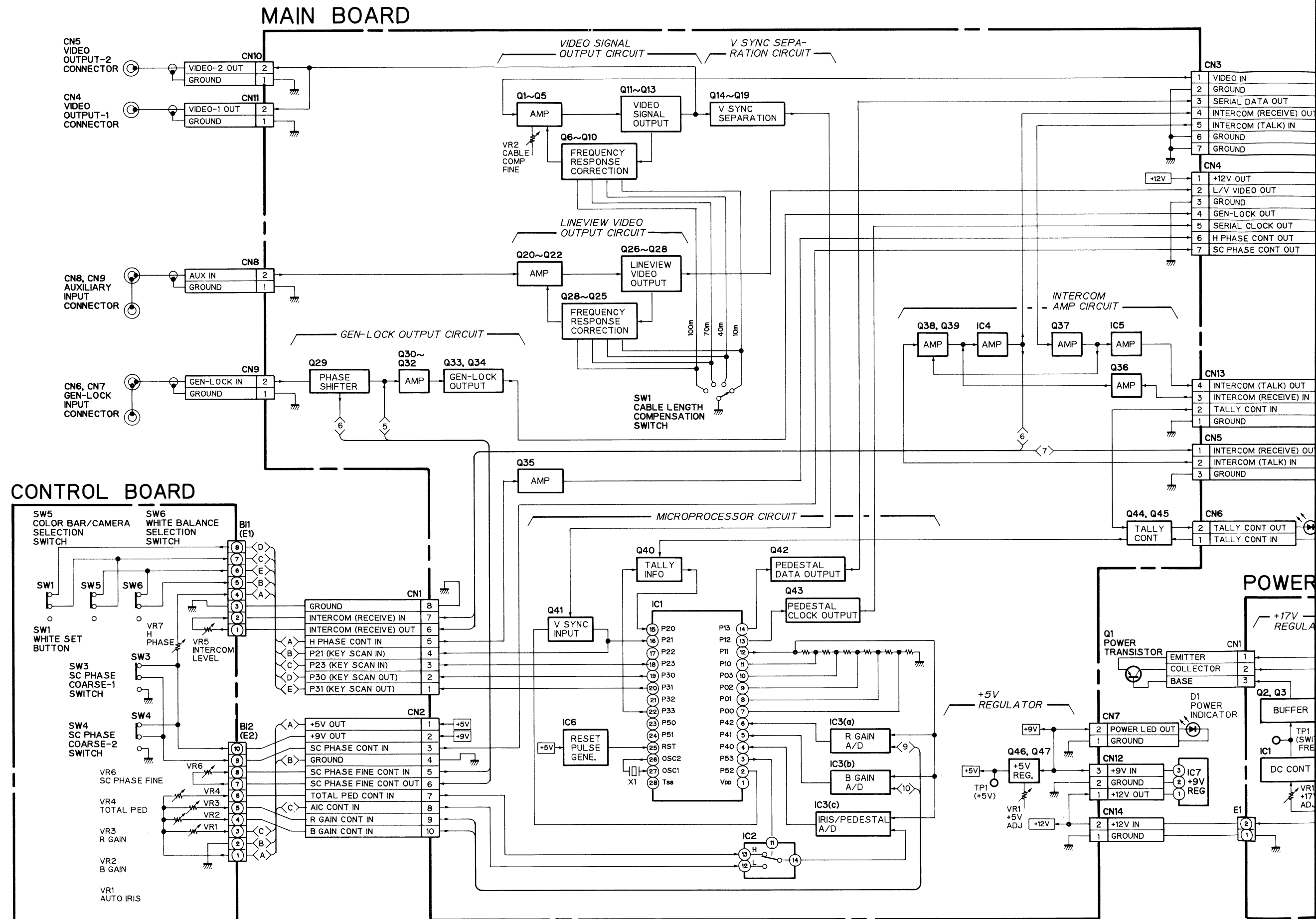


10Pin Connector
(Camera side)



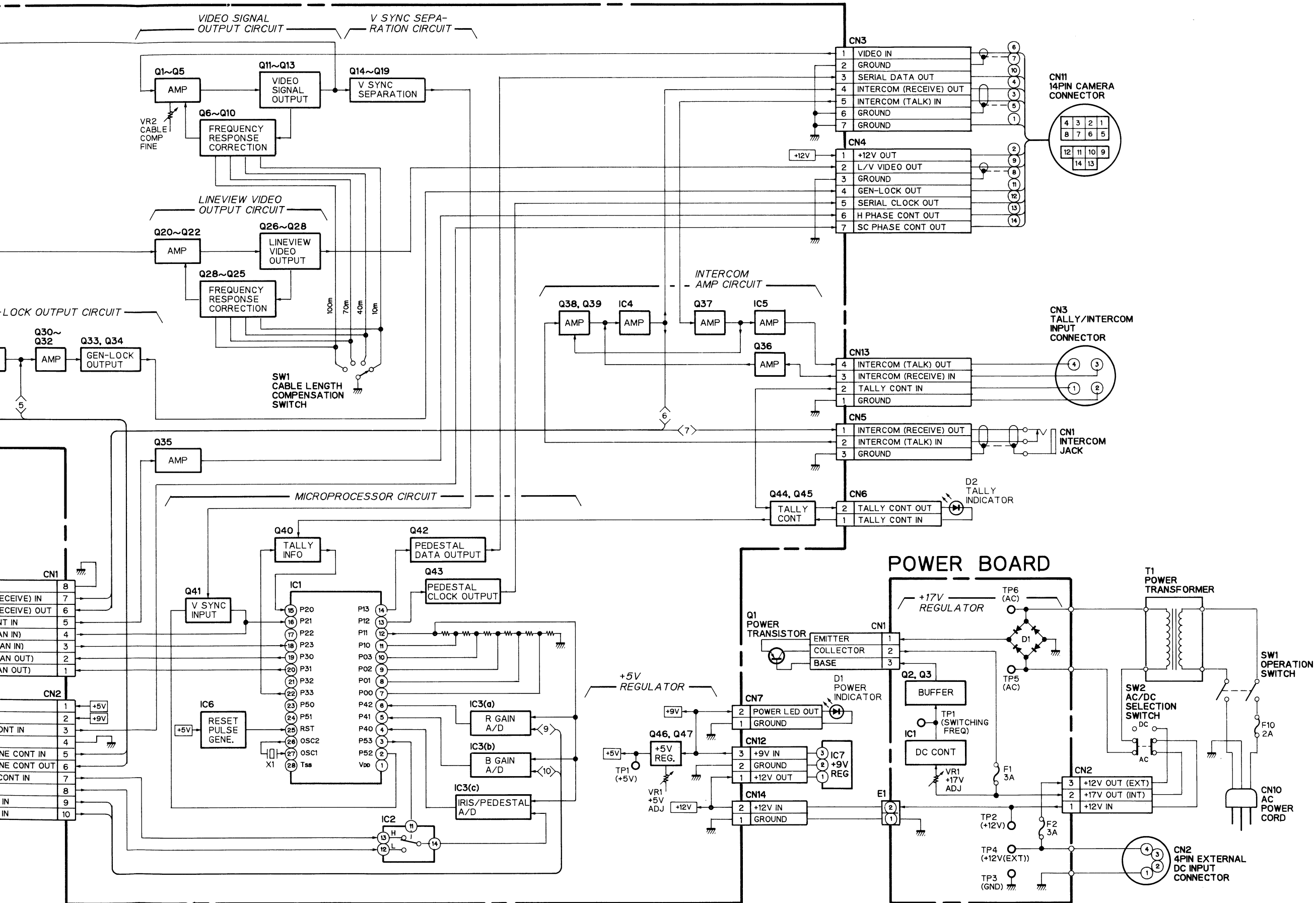
10 Pin Connector
(WV-CR12 Side)

BLOCK DIAGRAM OF REMOTE CONTROL UNIT WV-RC35

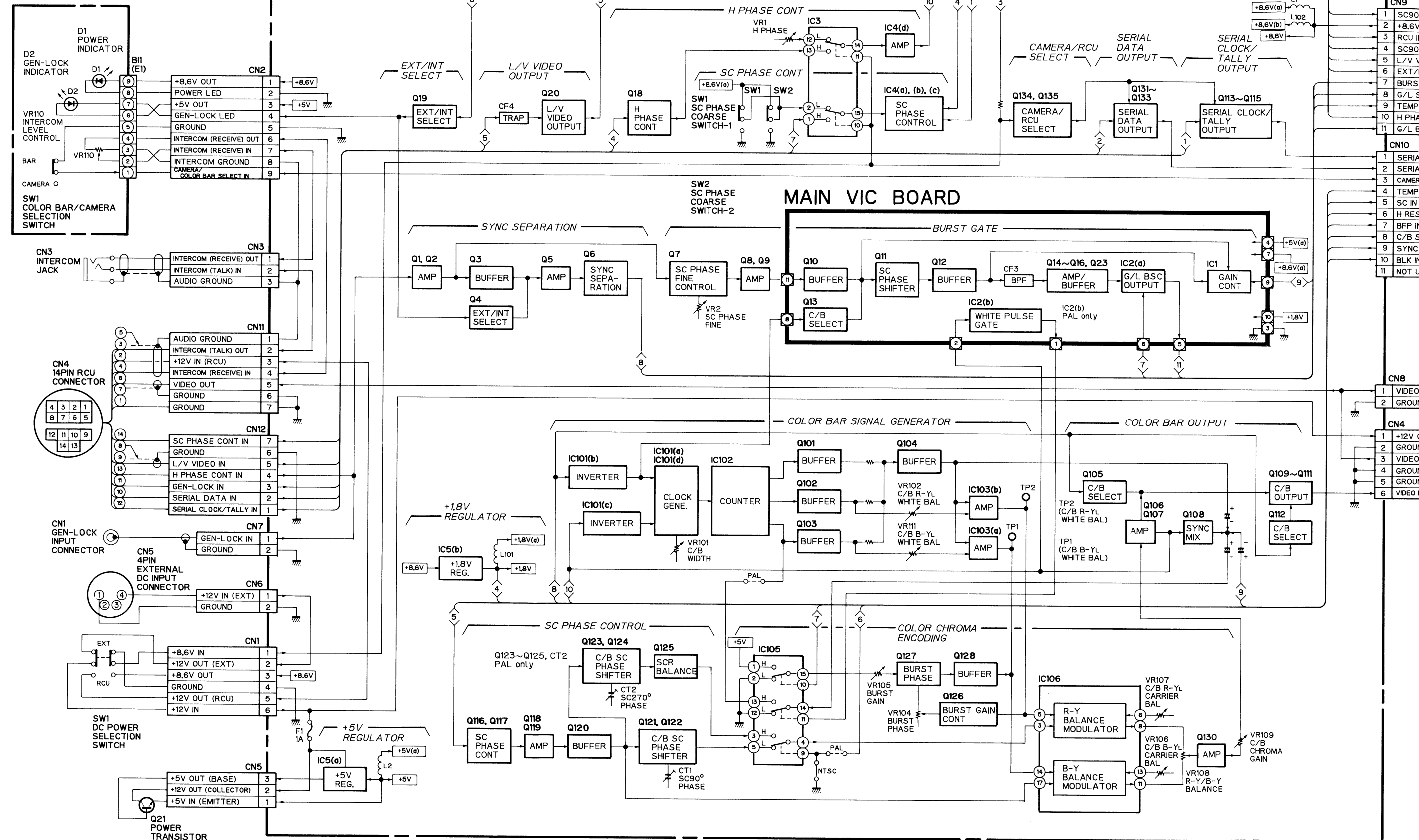


BLOCK DIAGRAM OF REMOTE CONTROL UNIT WV-RC35

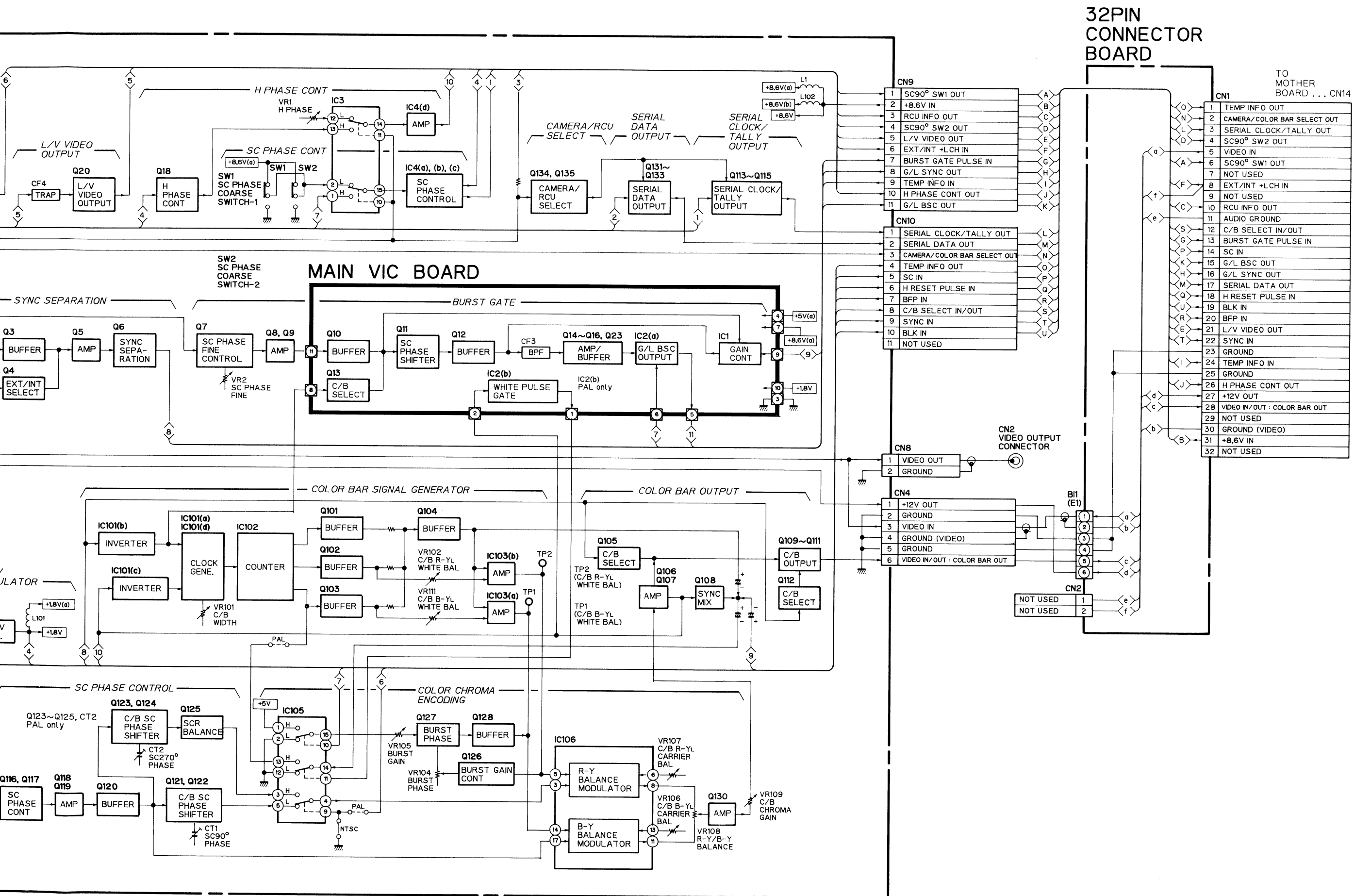
ARD



MAIN BOARD

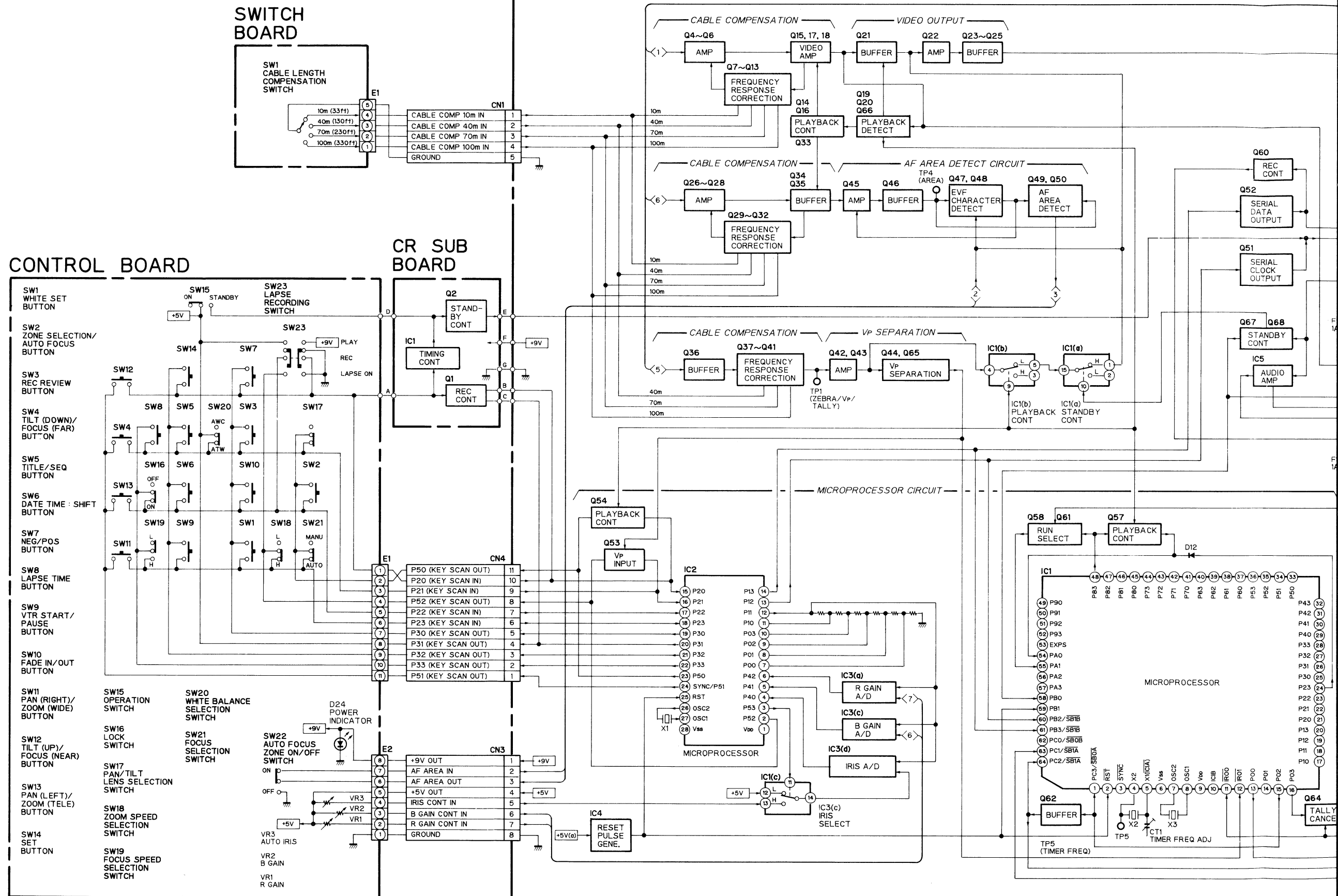


BLOCK DIAGRAM OF RCU ADAPTOR WV-AD37



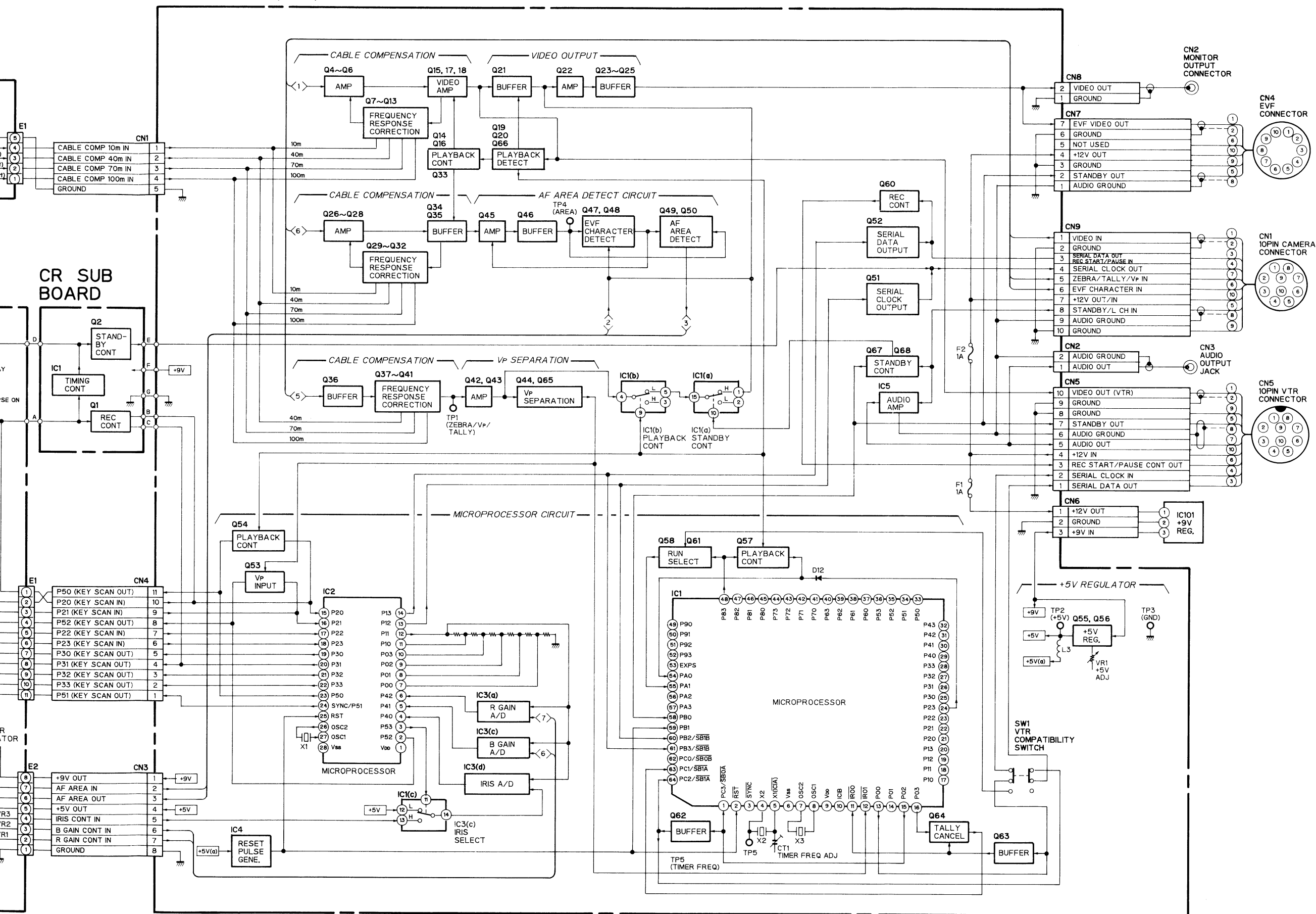
BLOCK DIAGRAM OF CAMERA REMOTE CONTROLLER WV-CR12

CR MAIN BOARD



BLOCK DIAGRAM OF CAMERA REMOTE CONTROLLER WV-CR12

CR MAIN BOARD



WV-RC35
MAIN BOARD

IC1	MN1551CVT35
IC2	MN4053BS
IC3	M5234FP
IC4	NJM3414M
IC5	NJM386M
IC6	MN1280T
IC7	AN6541
Q1	25D601-QR (Y)
Q2	25C2404-CD (U)
Q3	25C2404-CD (U)
Q4	25A1022-C (E)
Q5	25C2404-CD (U)
Q6	25A1022-C (E)
Q7	25A1022-C (E)
Q8	25A1022-C (E)
Q9	25A1022-C (E)
Q10	25A1022-C (E)
Q11	25C2404-CD (U)
Q12	25D601-QR (Y)
Q13	25D601-QR (Y)
Q14	25A1022-C (E)
Q15	25C2404-CD (U)
Q16	25B709-Q (A)
Q17	25B709-Q (A)
Q18	25D601-QR (Y)
Q19	25B709-Q (A)
Q20	25D601-QR (Y)
Q21	25A1022-C (E)
Q22	25C2404-CD (U)
Q23	25A1022-C (E)
Q24	25A1022-C (E)
Q25	25A1022-C (E)
Q26	25C2404-CD (U)
Q27	25D601-QR (Y)
Q28	25D601-QR (Y)
Q29	25A1022-C (E)
Q30	25C2404-CD (U)
Q31	25C2404-CD (U)
Q32	25C2404-CD (U)
Q33	25D601-QR (Y)
Q34	25D601-QR (Y)
Q35	25B709-Q (A)
Q36	25D601-QR (Y)
Q37	25D601-QR (Y)
Q38	25D601-QR (Y)
Q39	25D601-QR (Y)
Q40	25D601-QR (Y)
Q41	25D601-QR (Y)
Q42	25D601-QR (Y)
Q43	25D601-QR (Y)
Q44	25D601-QR (Y)
Q45	25B709-Q (A)
Q46	25D601-QR (Y)
Q47	25B709-Q (A)
D1	MA151K (MH)
D2	MA151K (MH)
D3	MA151K (MH)
D4	MA151K (MH)
D5	MA151K (MH)
D6	MA151K (MH)
D7	MA151K (MH)
D8	MA151K (MH)
Q1	25B946-PQ
D1	LN21RPH
D2	YFLN31GCP

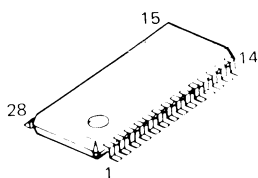
POWER BOARD

IC1	NJM3524D
Q2	25C1384-QRS
Q3	25A684-QR
D1	D5FB2052
D2	ESAB82-004
D4	RM4ZLFK1

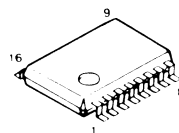
CONTROL BOARD

D1	MA165
D2	MA165
D3	MA165

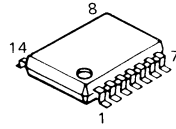
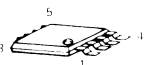
MN1551CVT



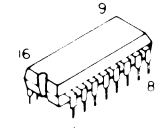
MN4053BS



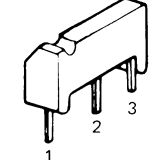
M5234FP

NJM386M
NJM3414M

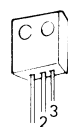
NJM3524D



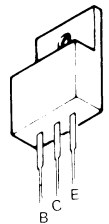
MN1280T



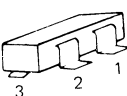
AN6541



25B946-PQ

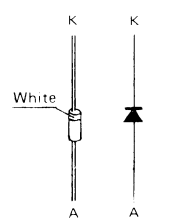


MA151K

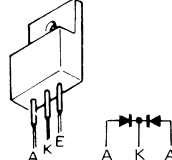


1: NC
2: Anode
3: Cathode

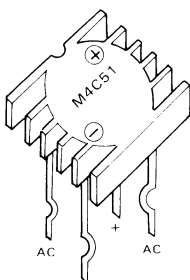
MA165



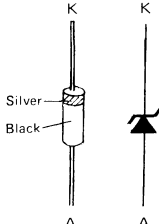
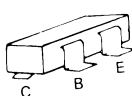
ESAB82-004



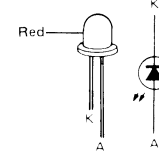
D5FB2052



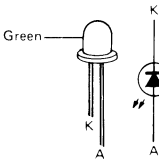
RM4ZLFK1

25A1022-C
25B709-Q
25C2404-CD
25D601-QR

LN21RPH

25A684-QR
25C1384-QRS

YFLN31GCP



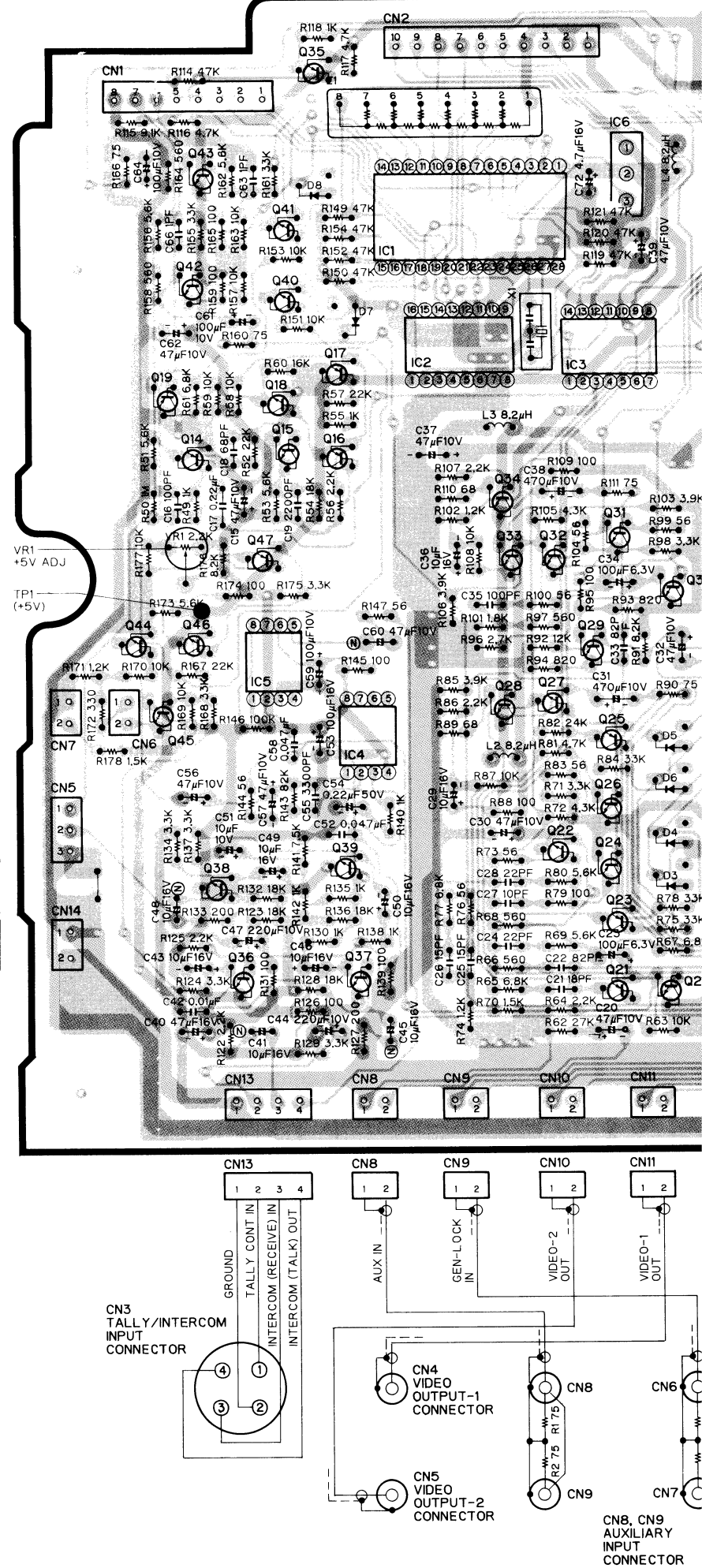
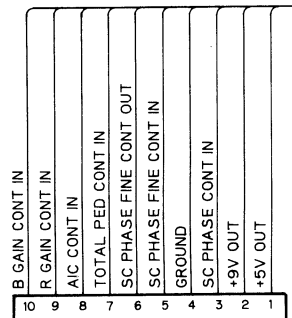
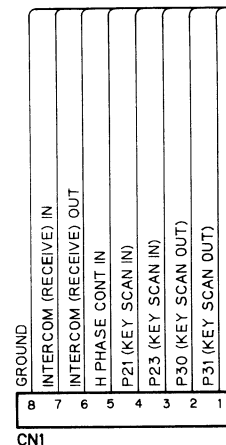
E

D

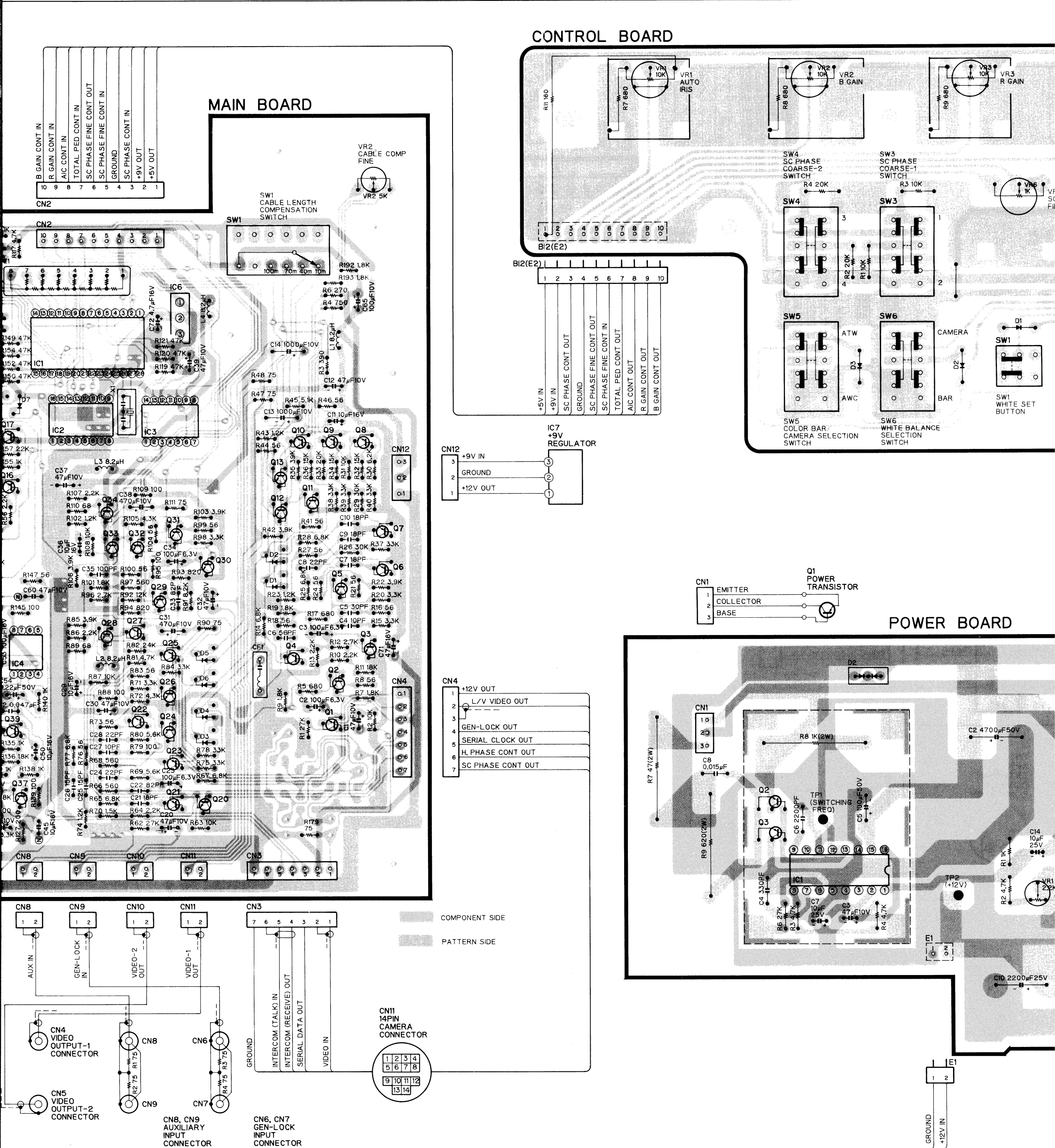
C

B

A



CONDUCTOR VIEW OF REMOTE CONTROL UNIT WV-RC35



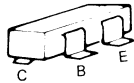
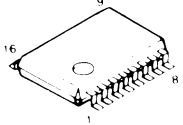
5



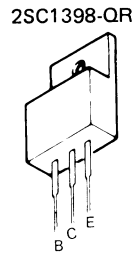
7

MN4053BS
MN4516BS
MN74HC221S

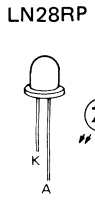
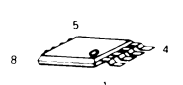
2SA1022-CD
2SB709-Q
2SC2404-CD
2SD601-QR



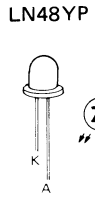
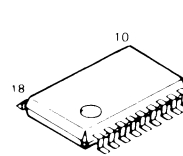
M5234FP
MN4011BS
YFNJM1496M



NJM3414M
NJM4560M



AN2020S



WV-AD37
MAIN BOARD

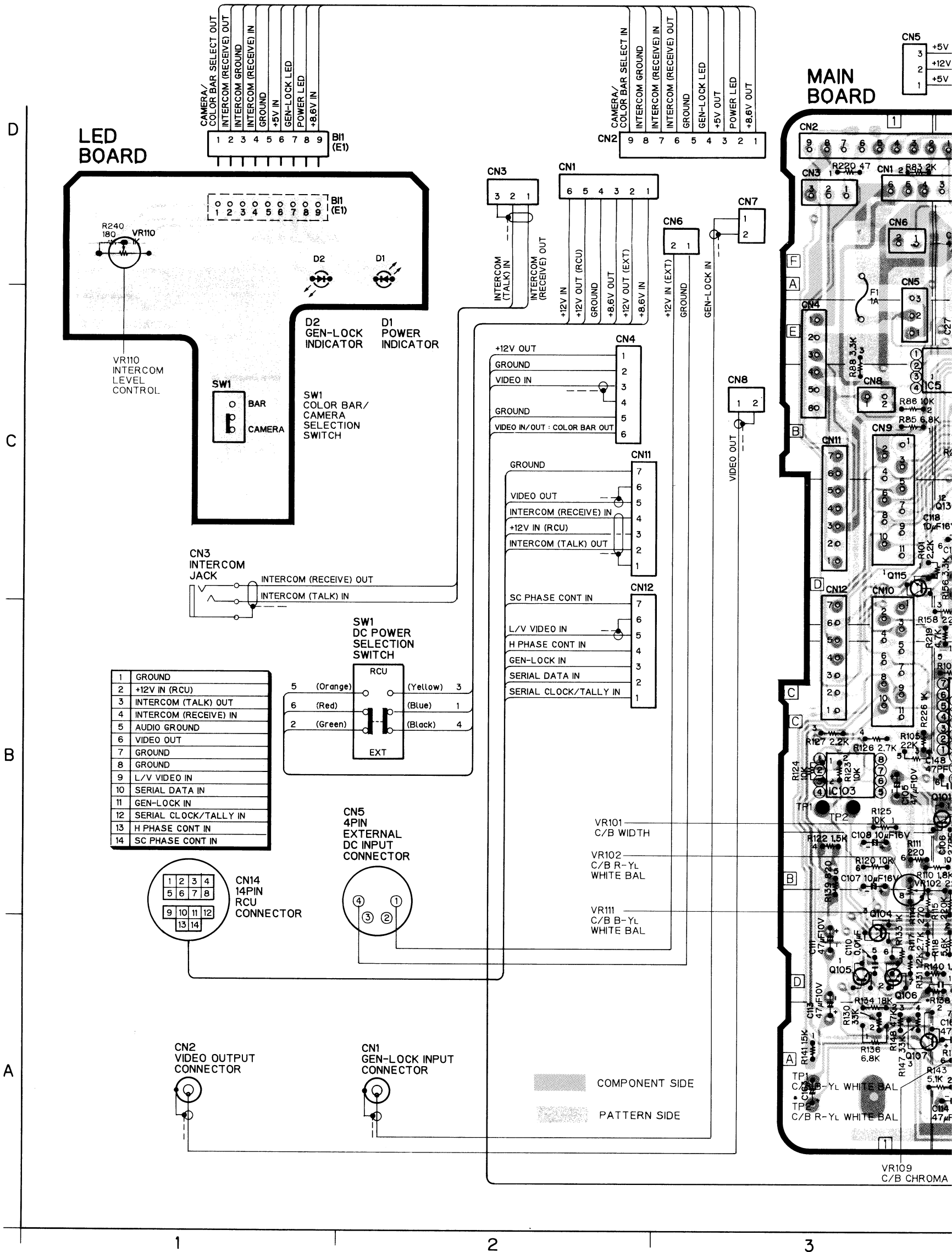
IC3	MN4053BS	C4
IC4	M5234FP	C4
IC5	NJM3414M	C5
IC101	MN4011BS	B4
IC102	MN4516BS	B4
IC103	NJM4560M	B3
IC105	MN4053BS	A4
IC106	AN2020S	A4
Q1	2SC2404-CD	(U) D4
Q2	2SD601-QR	(Y) D4
Q3	2SD601-QR	(Y) D4
Q4	2SD601-QR	(Y) D4
Q5	2SC2404-CD	(U) D5
Q6	2SB709-Q	(A) D4
Q7	2SC2404-CD	(U) C5
Q8	2SC2404-CD	(U) C4
Q9	2SC2404-CD	(U) D4
Q18	2SB709-Q	(A) D4
Q19	2SD601-QR	(Y) D4
Q20	2SB709-Q	(A) D4
Q21	2SC1398-QR	D4
Q101	2SB709-Q	(A) B3
Q102	2SB709-Q	(A) B4
Q103	2SB709-Q	(A) B4
Q104	2SD601-QR	A3
Q105	2SC2404-CD	(U) A3
Q106	2SC2404-CD	(U) A3
Q107	2SC2404-CD	(U) A3
Q108	2SC2404-CD	(U) A4
Q109	2SC2404-CD	(U) A4
Q110	2SD601-QR	(Y) A4
Q111	2SD601-QR	(Y) A4
Q112	2SD601-QR	(Y) A4
Q113	2SD601-QR	(Y) C4
Q114	2SD601-QR	(Y) C4
Q115	2SD601-QR	(Y) C3
Q116	2SC2404-CD	(U) B4
Q117	2SC2404-CD	(U) B4
Q118	2SC2404-CD	(U) B4
Q119	2SC2404-CD	(U) B4
Q120	2SB709-Q	(A) B4
Q121	2SC2404-CD	(U) B4
Q122	2SC2404-CD	(U) B4
Q126	2SB709-Q	(A) A4
Q127	2SD601-QR	(Y) A4
Q128	2SD601-QR	(Y) A4
Q129	2SB709-Q	(A) B4
Q130	2SC2404-CD	(U) A4
Q131	2SD601-QR	(Y) C4
Q132	2SD601-QR	(Y) B4
Q133	2SD601-QR	(Y) B4
Q134	2SB709-Q	(A) C4
Q135	2SD601-QR	(Y) C4
Q123	2SC2404-CD	(U) B5
Q124	2SC2404-CD	(U) A5
Q125	2SD601-QR	(Y) A5

MAIN VIC BOARD

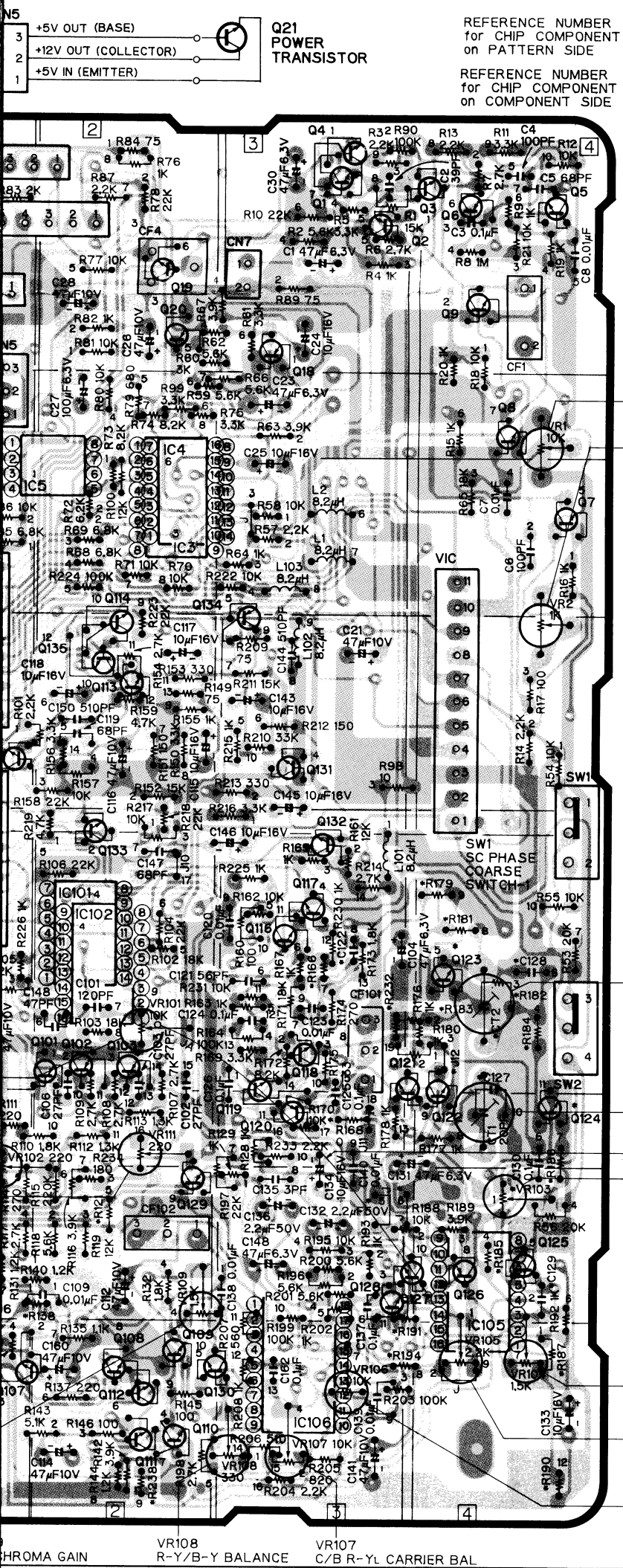
IC1	YFNJM1496M	C7
IC2	MN74HC221S	C7
Q10	2SC2404-CD	(U) C7
Q11	2SC2404-CD	(U) C7
Q12	2SA1022-CD	(E) C7
Q13	2SD601-QR	(Y) C7
Q14	2SC2404-CD	(U) C7
Q15	2SC2404-CD	(U) C7
Q16	2SC2404-CD	(U) C7
Q17	2SC2404-CD	(U) C7
Q23	2SC2404-CD	(U) C7

LED BOARD

D1	LN28RP	D2
D2	LN48YP	D2



CTOR VIEW OF RCU ADAPTOR WV-AD37



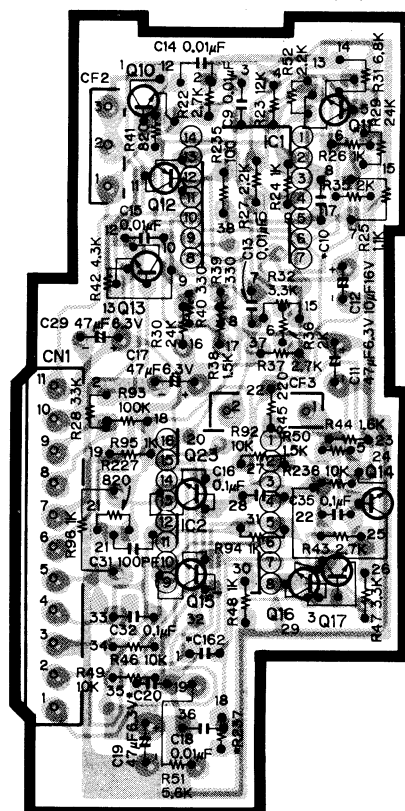
Symbol NO.	Ref. NO.	NTSC	PAL
Q125	4D5	NOT USED	USED
VR103	4D1	NOT USED	470
CT2		NOT USED	20PF
R138	2D2	47K	NOT USED
R166	3C7	750	820
R185	4D4	NOT USED	820
R190	4D12	3.9K	5.6K
R191	4D11	3.9K	390
R194	3D8	2.2K	820
R232	3C19	2.2K	0a
R238	2D9	NOT USED	24K
C122	3C8	15PF	5PF
C163		NOT USED	47µF10V
J11	3C18	NOT USED	0a
J12	4C3	0a	NOT USED

Symbol NO.	Ref. NO.	NTSC	PAL
Q123	4C5	NOT USED	USED
Q124	4B11	NOT USED	USED
R121	2B5	39K	68K
R168	3B12	0a	2.2K
R179	4C9	NOT USED	33
R181	4C8	NOT USED	1K
R182	4C3	NOT USED	1K
R183	4C2	NOT USED	1K
R184	4C4	NOT USED	33
R186	4B7	NOT USED	1K
R187	4A1	NOT USED	3.3K
C128	4C6	NOT USED	5PF
C129	4B2	NOT USED	0.1µF
J	3B5	NOT USED	0a
J	3B6	0a	NOT USED
C127	4B10	22PF	12PF

Symbol NO.	Ref. NO.	NTSC	PAL
R237	1B	NOT USED	120K
C20	19	18PF	12PF
C162	1	NOT USED	120PF

Symbol NO.	Ref. NO.	NTSC	PAL
C10	8	33PF	27PF

MAIN VIC BOARD



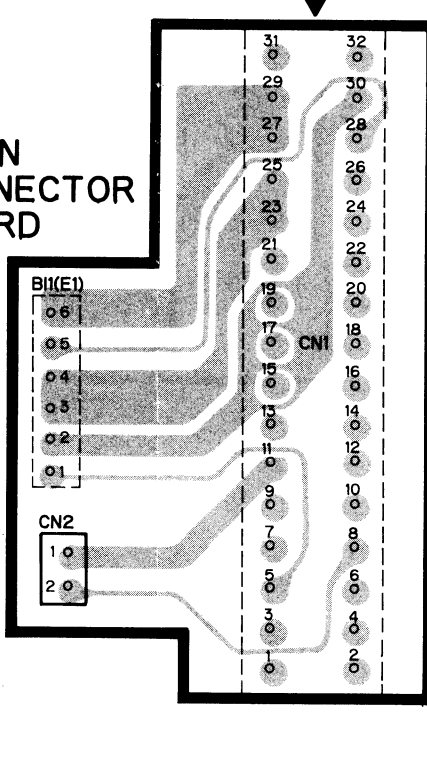
FLEXIBLE WIRE

Symbol NO.	Ref. NO.	NTSC	PAL
Q125	4D5	NOT USED	USED
VR103	4D1	NOT USED	470
CT2		NOT USED	20PF
R138	2D2	47K	NOT USED
R166	3C7	750	820
R185	4D4	NOT USED	820
R190	4D12	3.9K	5.6K
R191	4D11	3.9K	390
R194	3D8	2.2K	820
R232	3C19	2.2K	0a
R238	2D9	NOT USED	24K
C122	3C8	15PF	5PF
C163		NOT USED	47µF10V
J11	3C18	NOT USED	0a
J12	4C3	0a	NOT USED

Symbol NO.	Ref. NO.	NTSC	PAL
Q123	4C5	NOT USED	USED
Q124	4B11	NOT USED	USED
R121	2B5	39K	68K
R168	3B12	0a	2.2K
R179	4C9	NOT USED	33
R181	4C8	NOT USED	1K
R182	4C3	NOT USED	1K
R183	4C2	NOT USED	1K
R184	4C4	NOT USED	33
R186	4B7	NOT USED	1K
R187	4A1	NOT USED	3.3K
C128	4C6	NOT USED	5PF
C129	4B2	NOT USED	0.1µF
J	3B5	NOT USED	0a
J	3B6	0a	NOT USED
C127	4B10	22PF	12PF

32PIN CONNECTOR BOARD

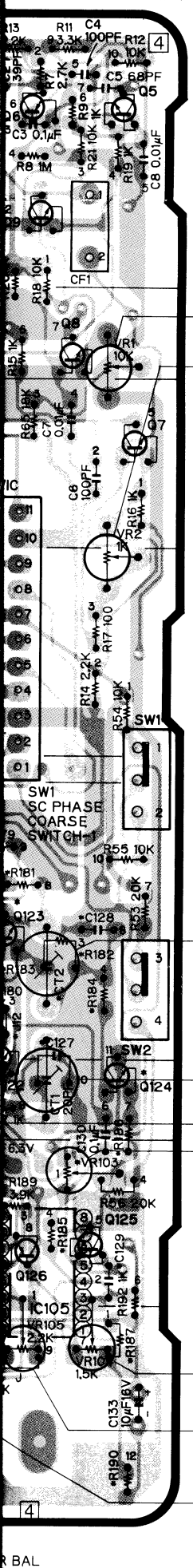
Symbol NO.	Ref. NO.	NTSC	PAL
Q125	4D5	NOT USED	USED
VR103	4D1	NOT USED	470
CT2		NOT USED	20PF
R138	2D2	47K	NOT USED
R166	3C7	750	820
R185	4D4	NOT USED	820
R190	4D12	3.9K	5.6K
R191	4D11	3.9K	390
R194	3D8	2.2K	820
R232	3C19	2.2K	0a
R238	2D9	NOT USED	24K
C122	3C8	15PF	5PF
C163		NOT USED	47µF10V
J11	3C18	NOT USED	0a
J12	4C3	0a	NOT USED



Symbol NO.	Ref. NO.	NTSC	PAL
Q125	4D5	NOT USED	USED
VR103	4D1	NOT USED	470
CT2		NOT USED	20PF
R138	2D2	47K	NOT USED
R166	3C7	750	820
R185	4D4	NOT USED	820
R190	4D12	3.9K	5.6K
R191	4D11	3.9K	390
R194	3D8	2.2K	820
R232	3C19	2.2K	0a
R238	2D9	NOT USED	24K
C122	3C8	15PF	5PF
C163		NOT USED	47µF10V
J11	3C18	NOT USED	0a
J12	4C3	0a	NOT USED

REFERENCE NUMBER
for CHIP COMPONENT
on PATTERN SIDE

REFERENCE NUMBER
for CHIP COMPONENT
on COMPONENT SIDE



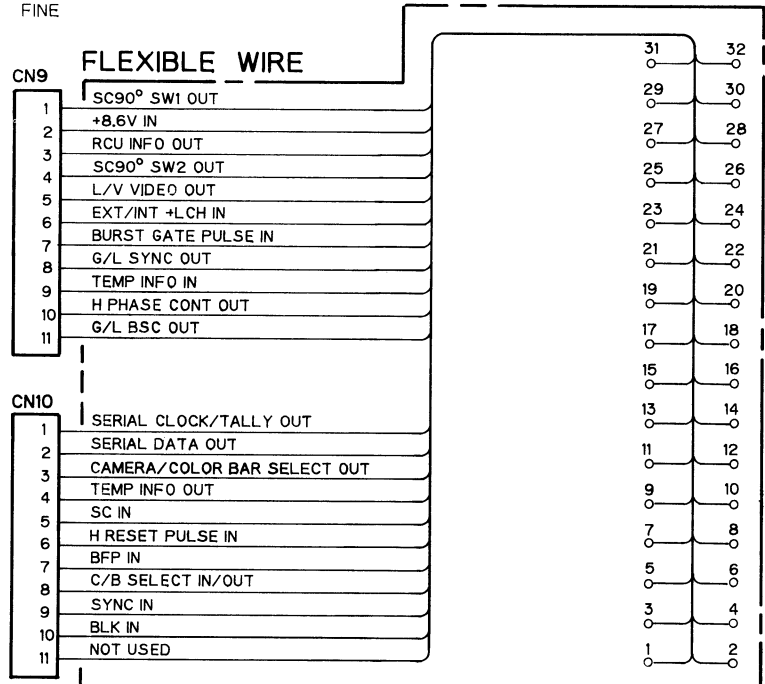
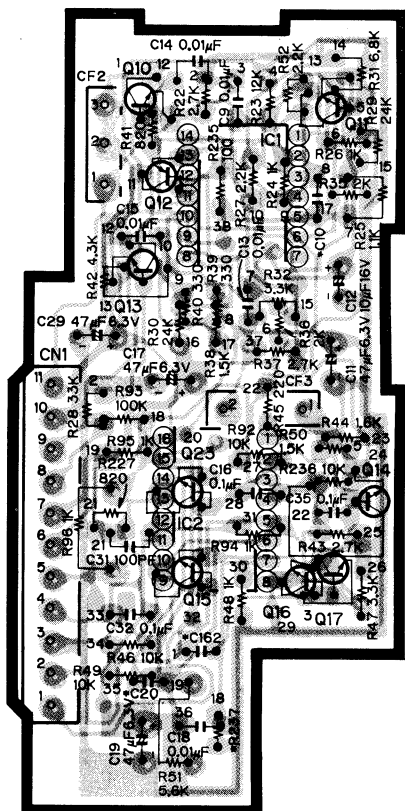
Symbol NO.	Ref. NO.	NTSC	PAL
Q125	4D5	NOT USED	USED
VR103	4D1	NOT USED	470
CT2		NOT USED	20PF
R138	2D2	47K	NOT USED
R166	3C7	750	820
R185	4D4	NOT USED	820
R190	4D12	3.9K	5.6K
R191	4D11	3.9K	390
R194	3D8	2.2K	820
R232	3C19	2.2K	0Ω
R238	2D9	NOT USED	24K
C122	3C8	15PF	5PF
C163		NOT USED	47μF10V
J11	3C18	NOT USED	0Ω
J12	4C3	0Ω	NOT USED

Symbol NO.	Ref. NO.	NTSC	PAL
Q123	4C5	NOT USED	USED
Q124	4B11	NOT USED	USED
R121	2B5	39K	68K
R168	3B12	0Ω	2.2K
R179	4C9	NOT USED	33
R181	4C8	NOT USED	1K
R182	4C3	NOT USED	1K
R183	4C2	NOT USED	1K
R184	4C4	NOT USED	33
R186	4B7	NOT USED	1K
R187	4A1	NOT USED	3.3K
C128	4C6	NOT USED	5PF
C129	4B2	NOT USED	0.1μF
J	3B5	NOT USED	0Ω
J	3B6	0Ω	NOT USED
C127	4B10	22PF	12PF

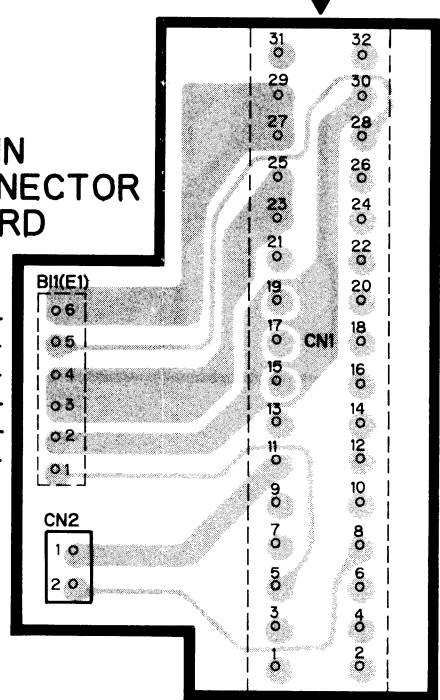
Symbol NO.	Ref. NO.	NTSC	PAL
R237	1B	NOT USED	120K
C20	19	18PF	12PF
C162	1	NOT USED	120PF

Symbol NO.	Ref. NO.	NTSC	PAL
C10	8	33PF	27PF

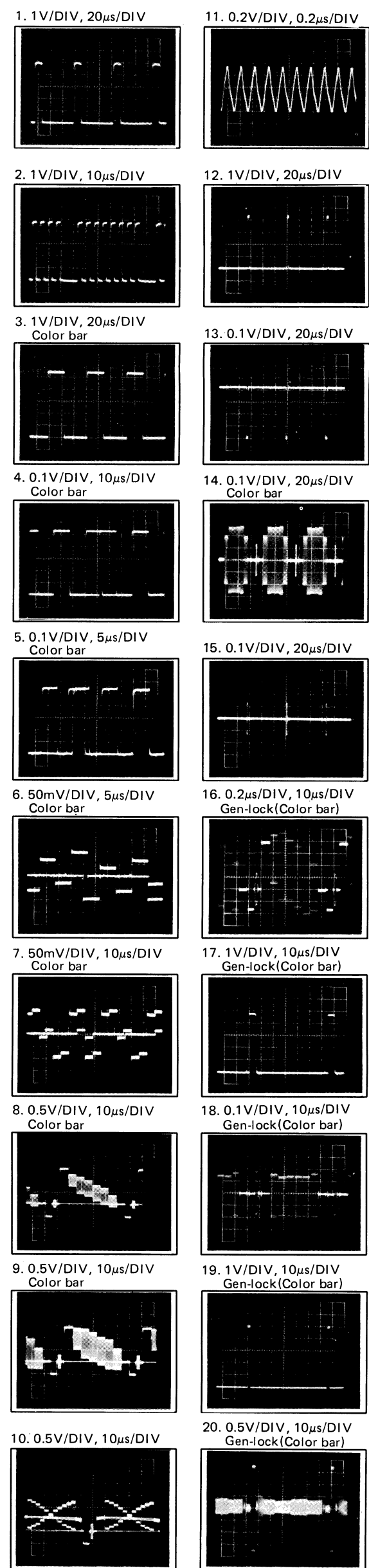
MAIN VIC BOARD



32PIN CONNECTOR BOARD



32	NOT USED
31	+8.6V IN
30	GROUND (VIDEO)
29	NOT USED
28	VIDEO IN/OUT : COLOR BAR OUT
27	+12V OUT
26	H PHASE CONT OUT
25	GROUND
24	TEMP INFO IN
23	GROUND
22	SYNC IN
21	L/V VIDEO OUT
20	BFP IN
19	BLK IN
18	H RESET PULSE IN
17	SERIAL DATA OUT
16	G/L SYNC OUT
15	G/L BSC OUT
14	SC IN
13	BURST GATE PULSE IN
12	C/B SELECT IN/OUT
11	AUDIO GROUND
10	RCU INFO OUT
9	NOT USED
8	EXT/INT +LCH IN
7	NOT USED
6	SC90° SW1 OUT
5	VIDEO IN
4	SC90° SW2 OUT
3	SERIAL CLOCK/TALLY OUT
2	CAMERA/COLOR BAR SELECT OUT
1	TEMP INFO OUT



SCHEMATIC DIAGRAM OF RCU ADAPTOR WV-AD37

WV-AD37
MAIN BOARD

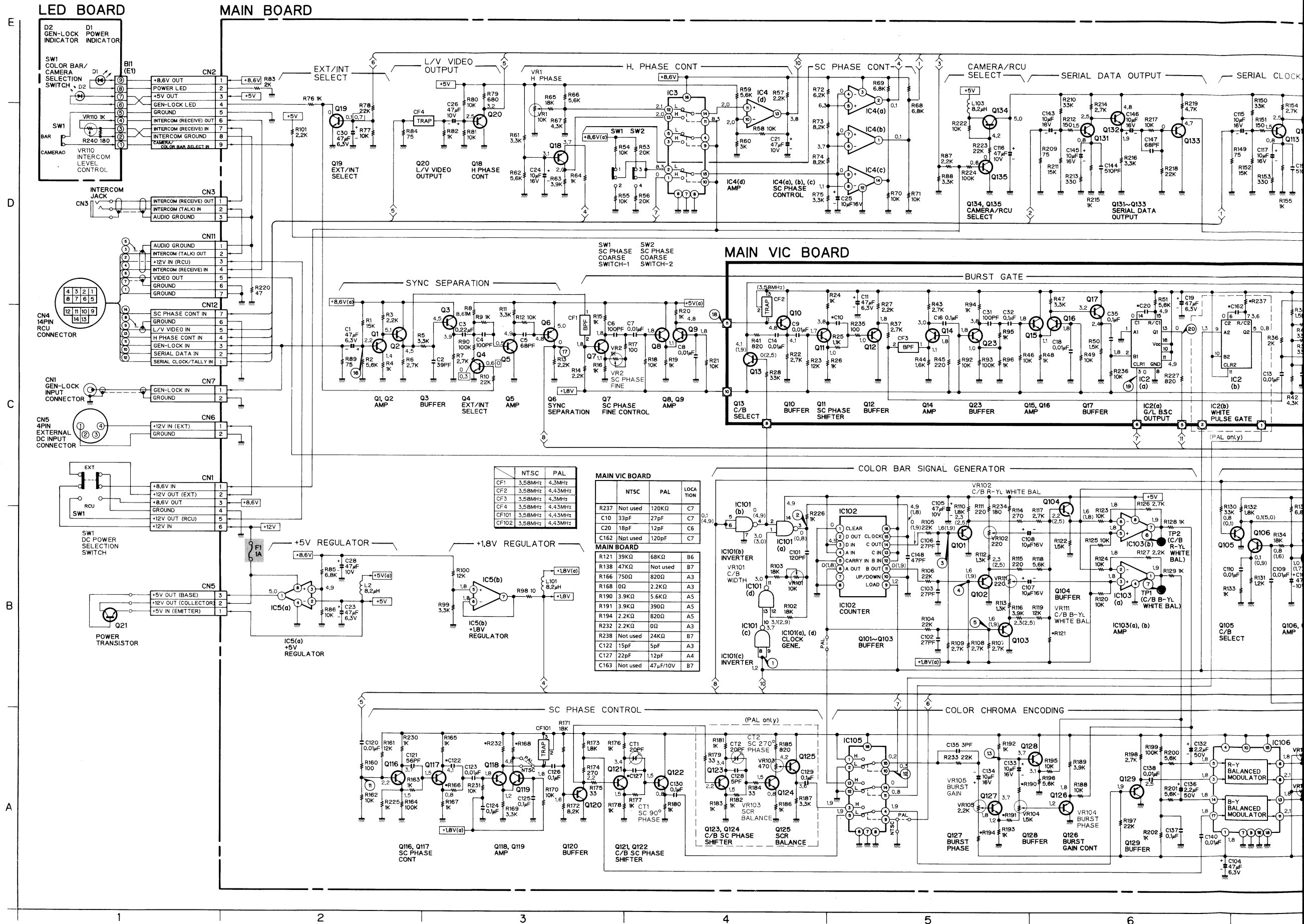
IC3	MN4053B5		D4
IC4	MS234FP		D4, D5
IC5	NJM3414M		B2, B3
IC101	MN4011B5		B4
IC102	MN4516B5		B5
IC103	NJM4560M		B6
IC105	MN4053B5		A5
IC106	AN2020S		A7
Q1	25C2404-CD	(U)	C2
Q2	25D601-QR	(Y)	C2
Q3	25D601-QR	(Y)	C3
Q4	25D601-QR	(Y)	C3
Q5	25C2404-CD	(U)	C3
Q6	25B709-Q	(A)	C3
Q7	25C2404-CD	(U)	C3
Q8	25C2404-CD	(U)	C4
Q9	25C2404-CD	(U)	C4
Q18	25B709-Q	(A)	D3
Q19	25D601-QR	(Y)	D2
Q20	25B709-Q	(A)	D3
Q21	25C1398-QR		B1
Q101	25B709-Q	(A)	B5
Q102	25B709-Q	(A)	B5
Q103	25B709-Q	(A)	B5
Q104	25D601-QR		B6
Q105	25C2404-CD	(U)	B7
Q106	25C2404-CD	(U)	B7
Q107	25C2404-CD	(U)	B7
Q108	25C2404-CD	(U)	B7
Q109	25C2404-CD	(U)	B7
Q110	25D601-QR	(Y)	B8
Q111	25D601-QR	(Y)	B8
Q112	25D601-QR	(Y)	B8
Q113	25D601-QR	(Y)	D7
Q114	25D601-QR	(Y)	D7
Q115	25D601-QR	(Y)	D7
Q116	25C2404-CD	(U)	A2
Q117	25C2404-CD	(U)	A3
Q118	25C2404-CD	(U)	A3
Q119	25C2404-CD	(U)	A3
Q120	25B709-Q	(A)	A3
Q121	25C2404-CD	(U)	A3
Q122	25C2404-CD	(U)	A4
Q126	25B709-Q	(A)	A6
Q127	25D601-QR	(Y)	A5
Q128	25D601-QR	(Y)	A5
Q129	25B709-Q	(A)	A6
Q130	25C2404-CD	(U)	A7
Q131	25D601-QR	(Y)	D6
Q132	25D601-QR	(Y)	D6
Q133	25D601-QR	(Y)	D6
Q134	25B709-Q	(A)	D5
Q135	25D601-QR	(Y)	D5
(PAL only)			
Q123	25C2404-CD	(U)	A4
Q124	25C2404-CD	(U)	A4
Q125	25D601-QR	(Y)	A4

MAIN VIC BOARD

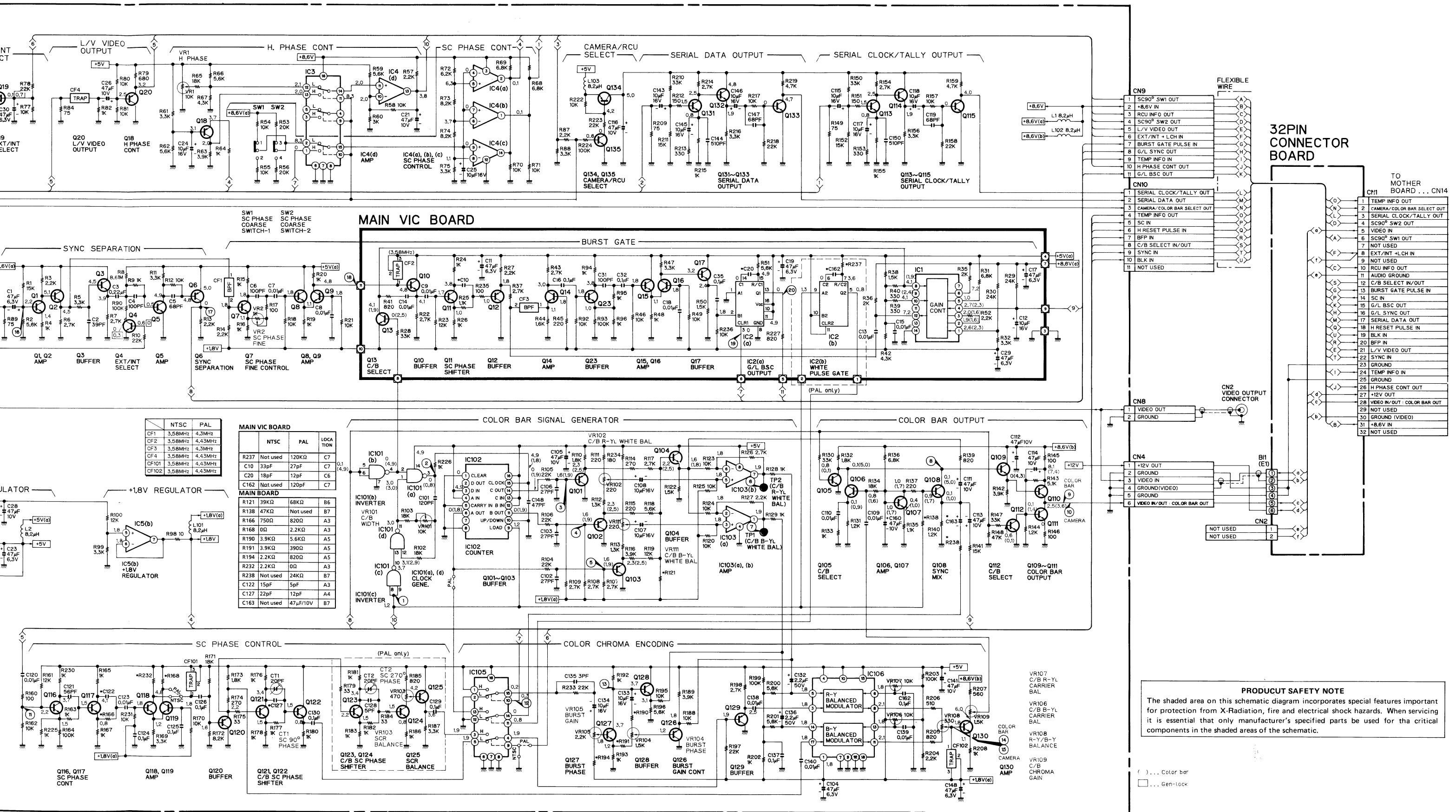
IC1	YFNJM1496M	C7
IC2	MN74HC221S	C6
Q10	25C2404-CD (U)	C4
Q11	25C2404-CD (U)	C5
Q12	25A1022-CD (E)	C5
Q13	25D601-QR (Y)	C4
Q14	25C2404-CD (U)	C5
Q15	25C2404-CD (U)	C6
Q16	25C2404-CD (U)	C6
Q17	25C2404-CD (U)	C6
Q23	25C2404-CD (U)	C5

LED BOARD

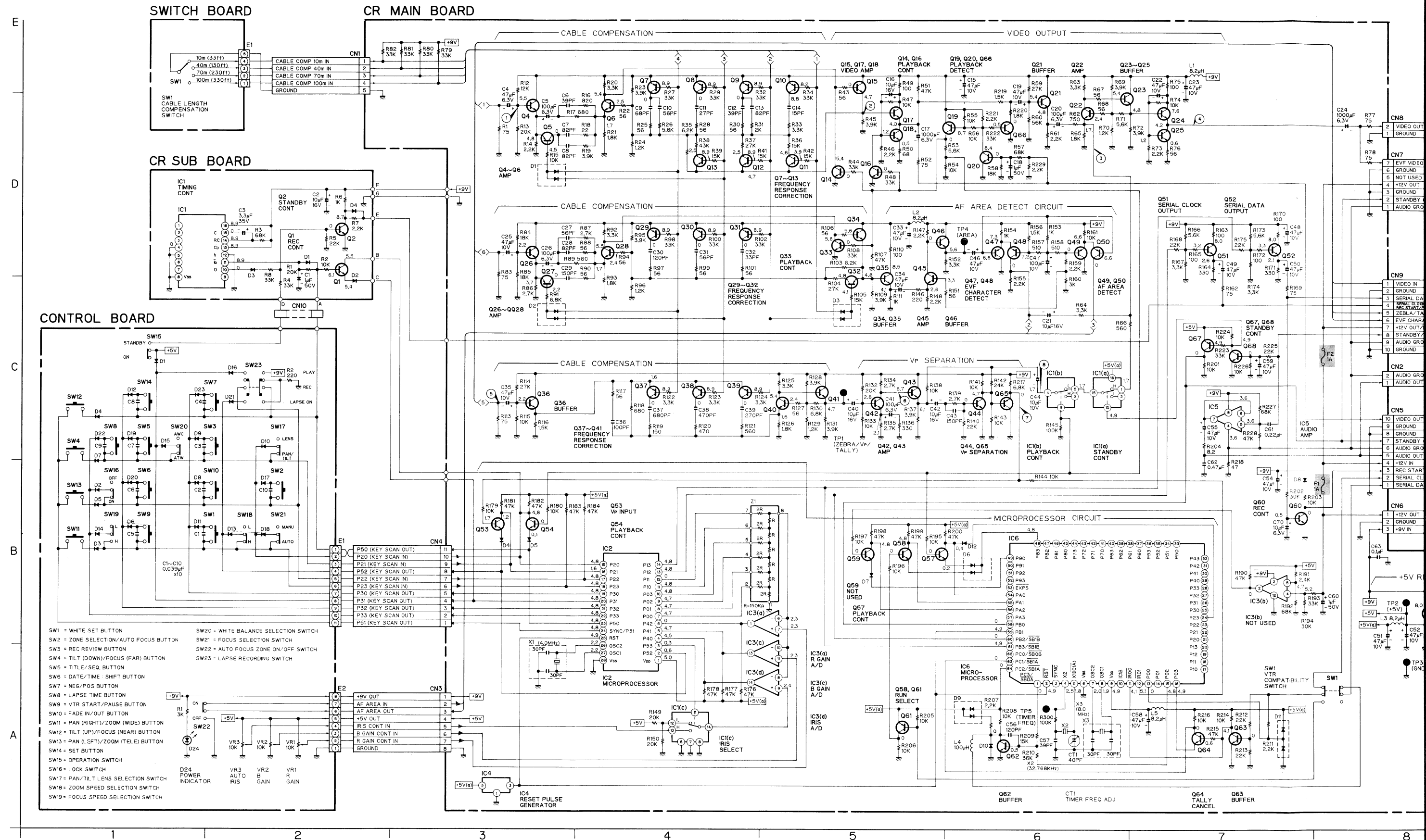
D1	LN28RP	E1
D2	LN48YP	E1



SCHEMATIC DIAGRAM OF RCU ADAPTOR WV-AD37



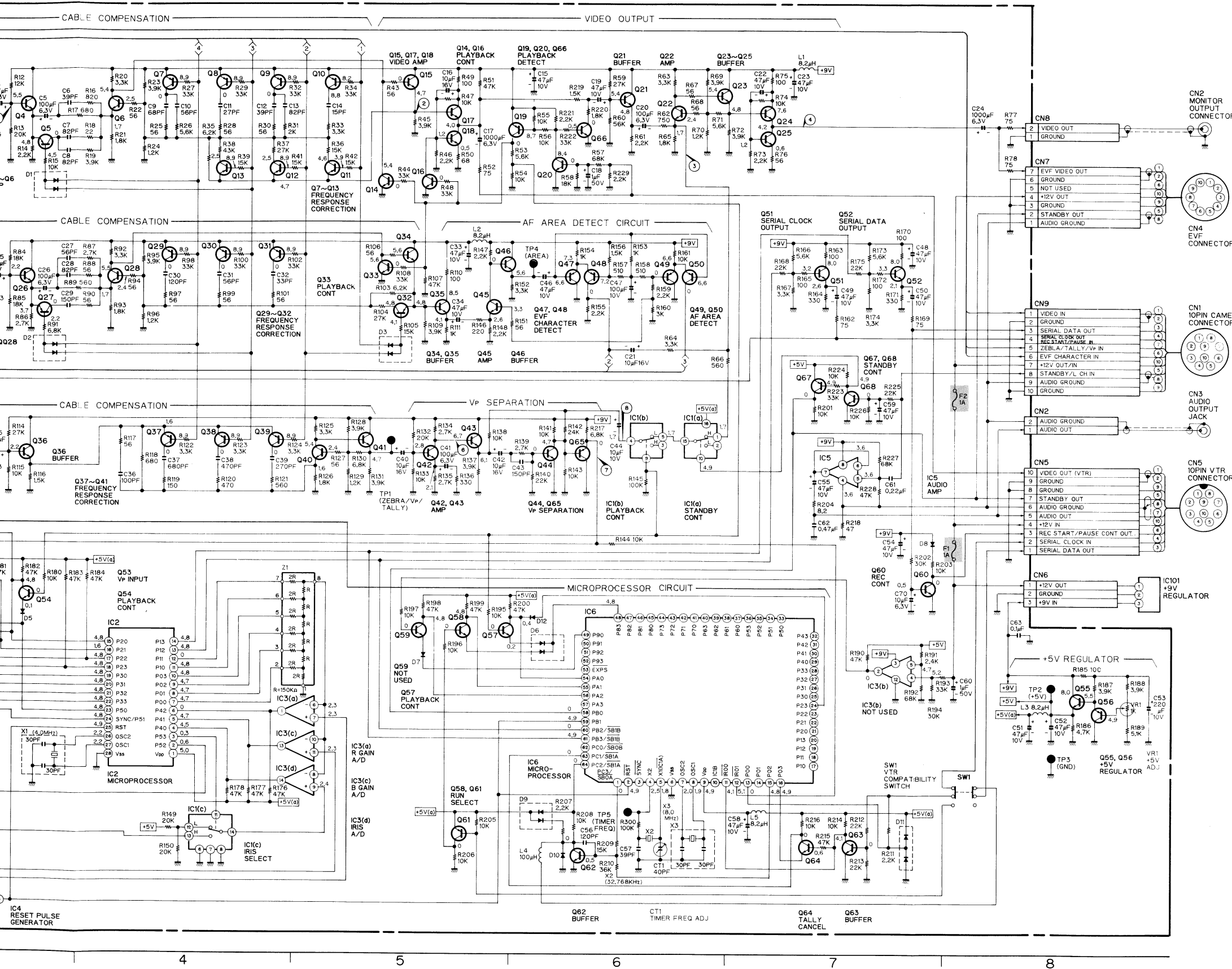
SCHEMATIC DIAGRAM OF CAMERA REMOTE CONTROLLER WV-CR12



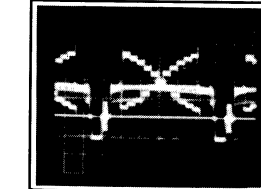
PRODUCT SAFETY NOTE

The shaded area on this schematic diagram incorporates special features important for protection from X-Radiation, fire and electrical shock hazards. When servicing it is essential that only manufacturer's specified parts be used for the critical components in the shaded areas of the schematic.

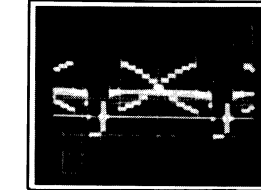
SCHEMATIC DIAGRAM OF CAMERA REMOTE CONTROLLER WV-CR12



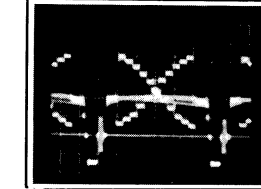
1. 0.2V/DIV, 10μs/DIV



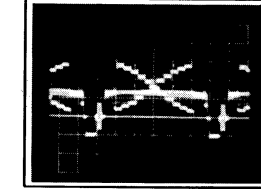
2. 0.5V/DIV, 10μs/DIV



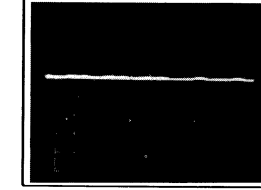
3. 0.05V/DIV, 10μs/DIV



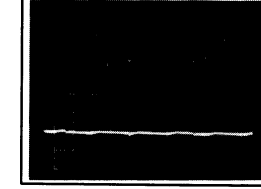
4. 0.5V/DIV, 10μ/DIV



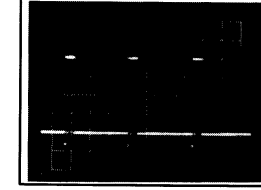
5. 0.05V/DIV, 5ms/DIV



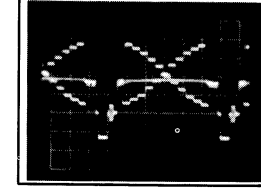
6. 0.5V/DIV, 5ms/DIV



7. 1V/DIV, 5ms/DIV



0.05V/DIV, 10μs/DIV

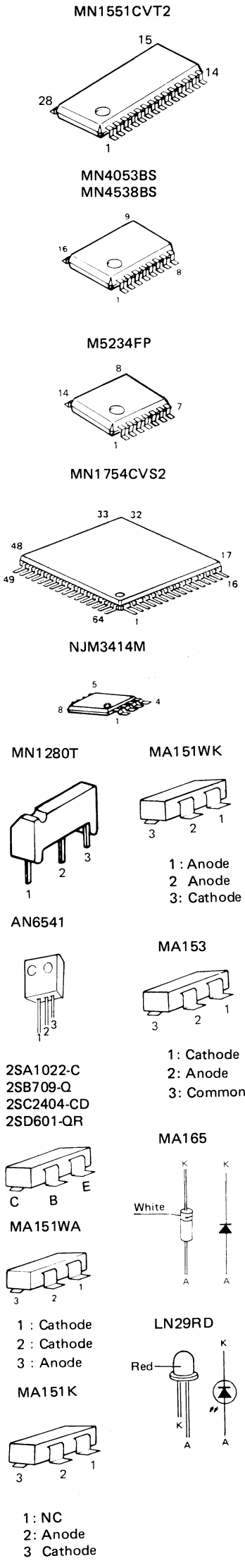


WV-CR12

IC101 AN6541 B8

MAIN BOARD

IC1	MN4053BS	A4
IC2	MN1551CVT2	B4
IC3	M5234FP	B5, A5, B7
IC4	MN1280T	A3
IC5	NJM3414M	C7
IC6	MN1754CVS2	B6
Q4	2SD601-QR	(Y) D3
Q5	2SA1022-C	(E) D3
Q6	2SC2404-CD	(U) D4
Q7	2SA1022-C	(E) E4
Q8	2SA1022-C	(E) E4
Q9	2SA1022-C	(E) E4
Q10	2SA1022-C	(E) E5
Q11	2SA1022-C	(E) D5
Q12	2SA1022-C	(E) D4
Q13	2SA1022-C	(E) D4
Q14	2SC2404-CD	(U) D5
Q15	2SC2404-CD	(U) E5
Q16	2SD601-QR	(Y) D5
Q17	2SD601-QR	(Y) D5
Q18	2SD601-QR	(Y) D5
Q19	2SB709-Q	(A) D6
Q20	2SD601-QR	(Y) D6
Q21	2SD601-QR	(Y) D6
Q22	2SC2404-CD	(U) D6
Q23	2SD601-QR	(Y) D7
Q24	2SD601-QR	(Y) D7
Q25	2SD601-QR	(Y) D7
Q26	2SD601-QR	(Y) D3
Q27	2SA1022-C	(E) C3
Q28	2SC2404-CD	(U) D4
Q29	2SD601-QR	(Y) D4
Q30	2SD601-QR	(Y) D4
Q31	2SD601-QR	(Y) D4
Q32	2SD601-QR	(Y) C5
Q33	2SC2404-CD	(U) D5
Q34	2SC2404-CD	(U) D5
Q35	2SD601-QR	(Y) C5
Q36	2SD601-QR	(Y) C3
Q37	2SD601-QR	(Y) C4
Q38	2SD601-QR	(Y) C4
Q39	2SD601-QR	(Y) C4
Q40	2SC2404-CD	(U) C5
Q41	2SD601-QR	(Y) C5
Q42	2SC2404-CD	(U) C5
Q43	2SD601-QR	(Y) C5
Q44	2SC2404-CD	(U) C6
Q45	2SC2404-CD	(U) C5
Q46	2SD601-QR	(Y) D6
Q47	2SA1022-C	(E) D6
Q48	2SA1022-C	(E) D6
Q49	2SA1022-C	(E) D6
Q50	2SA1022-C	(E) D6
Q51	2SD601-QR	(Y) D7
Q52	2SD601-QR	(Y) D7
Q53	2SD601-QR	(Y) B3
Q54	2SD601-QR	(Y) B3
Q55	2SD601-QR	(Y) B8
Q56	2SB709-Q	(A) B8
Q57	2SD601-QR	(Y) B6
Q58	2SD601-QR	(Y) B5
Q59	2SD601-QR	(Y) B5
Q60	2SD601-QR	(Y) A7
Q61	2SB709-Q	(A) A5
Q62	2SD601-QR	(Y) A6
Q63	2SD601-QR	(Y) A7
Q64	2SD601-QR	(Y) A7
Q65	2SB709-Q	(A) C6
Q66	2SD601-QR	(Y) D6
Q67	2SB709-Q	(A) C7
Q68	2SD601-QR	(Y) C7
D1	MA151WA (MN)	D3
D2	MA151WA (MN)	C3
D3	MA151WA (MN)	C5
D4	MA151K (MH)	B3
D5	MA151K (MH)	B3
D6	MA151WK (MT)	B6
D7	MA151K (MH)	B5
D8	MA151K (MH)	B7
D9	MA153 (MC)	A6
D10	MA151K (MH)	A6
D11	MA153 (MC)	A7
D12	MA151K (MH)	B6



For SCHEMATIC DIAGRAM

CONTROL BOARD		
D1	MA165	B1
D2	MA165	B1
D3	MA165	B1
D4	MA165	B1
D5	MA165	B1
D6	MA165	B1
D7	MA165	C1
D8	MA165	B1
D9	MA165	C1
D10	MA165	C2
D11	MA165	B1
D12	MA165	C1
D13	MA165	B2
D14	MA165	B1
D15	MA165	C1
D16	MA165	C2
D17	MA165	B2
D18	MA165	B2
D19	MA165	C1
D20	MA165	B1
D21	MA165	C2
D22	MA165	C1
D23	MA165	C1
D24	LN29RD	A1

CR SUB BOARD		
IC1	YFMN4538BS	D1
Q1	2SD601-QR	(Y) D2
Q2	2SD601-QR	(Y) D2

WV-CR12

IC101	AN6541	A1
-------	--------	----

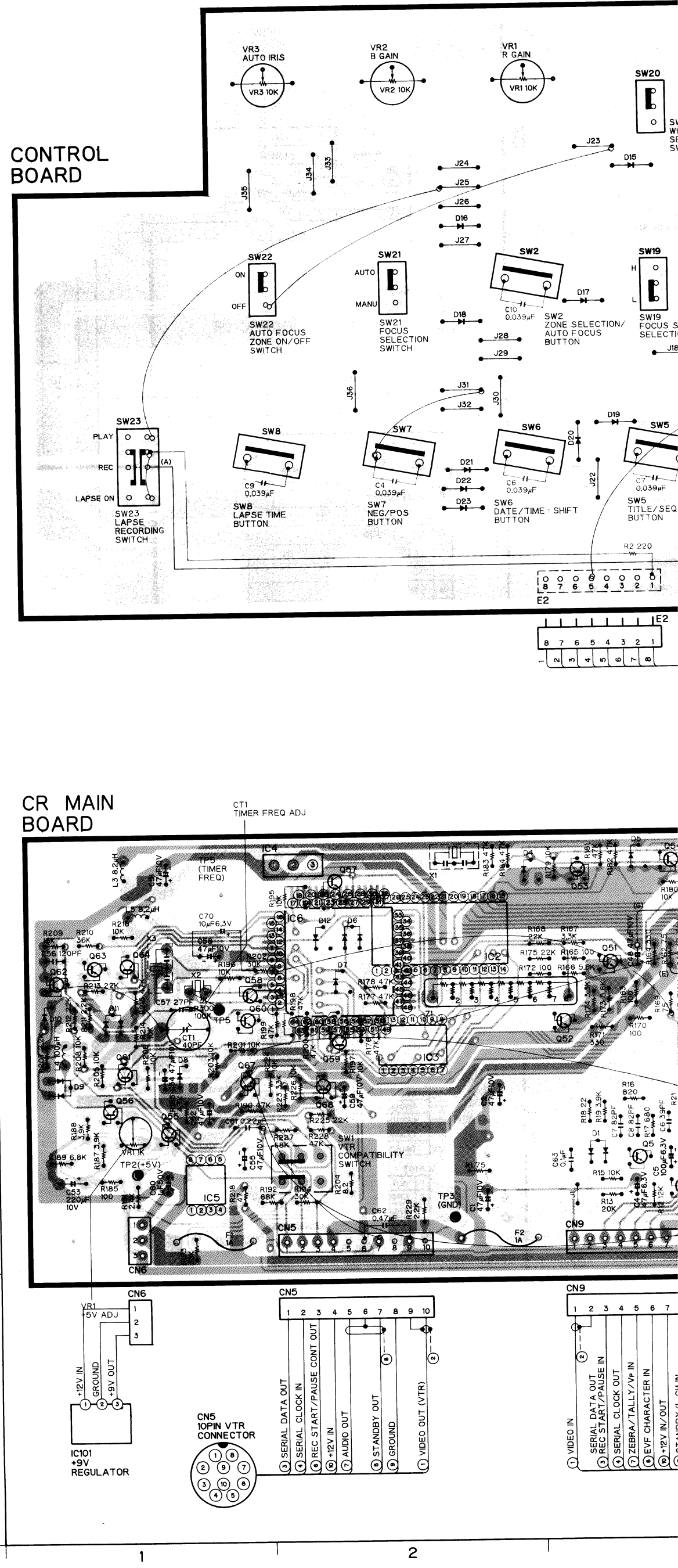
MAIN BOARD		
IC1	MN4053BS	C5
IC2	MN1551CVT3S	C2
IC3	M5234FP	B2
IC4	MN1280T	C2
IC5	NJM3414M	B1
IC6	MN1754CVS2	C2
Q4	2SD601-QR	(Y) B3
Q5	2SA1022-C	(E) B3
Q6	2SC2404-CD	(U) B3
Q7	2SA1022-C	(E) B3
Q8	2SA1022-C	(E) B3
Q9	2SA1022-C	(E) B3
Q10	2SA1022-C	(E) B4
Q11	2SA1022-C	(E) B4
Q12	2SA1022-C	(E) B4
Q13	2SA1022-C	(E) B4
Q14	2SC2404-CD	(U) B4
Q15	2SC2404-CD	(U) B4
Q16	2SD601-QR	(Y) B4
Q17	2SD601-QR	(Y) B5
Q18	2SD601-QR	(Y) B4
Q19	2SB709-Q	(A) B5
Q20	2SD601-QR	(Y) B5
Q21	2SD601-QR	(Y) B5
Q22	2SC2404-CD	(U) B5
Q23	2SD601-QR	(Y) B5
Q24	2SD601-QR	(Y) B6
Q25	2SD601-QR	(Y) B6
Q26	2SD601-QR	(Y) B5
Q27	2SA1022-C	(E) B5
Q28	2SC2404-CD	(U) B5
Q29	2SD601-QR	(Y) B5
Q30	2SD601-QR	(Y) B5
Q31	2SD601-QR	(Y) B6
Q32	2SD601-QR	(Y) B6
Q33	2SC2404-CD	(U) B6
Q34	2SC2404-CD	(U) B6
Q35	2SD601-QR	(Y) B6
Q36	2SD601-QR	(Y) B3
Q37	2SD601-QR	(Y) C4
Q38	2SD601-QR	(Y) C4
Q39	2SD601-QR	(Y) C4
Q40	2SC2404-CD	(U) C4
Q41	2SD601-QR	(Y) B4
Q42	2SC2404-CD	(U) C4
Q43	2SD601-QR	(Y) B4
Q44	2SC2404-CD	(U) C5
Q45	2SC2404-CD	(U) C5
Q46	2SD601-QR	(Y) C6
Q47	2SA1022-C	(E) C6
Q48	2SA1022-C	(E) C6
Q49	2SA1022-C	(E) C6
Q50	2SA1022-C	(E) C6
Q51	2SD601-QR	(Y) C3
Q52	2SD601-QR	(Y) B3
Q53	2SD601-QR	(Y) C3
Q54	2SD601-QR	(Y) C3
Q55	2SD601-QR	(Y) B1
Q56	2SB709-Q	(A) B1
Q57	2SD601-QR	(Y) C2
Q58	2SD601-QR	(Y) C1
Q59	2SD601-QR	(Y) B2
Q60	2SD601-QR	(Y) B1
Q61	2SB709-Q	(A) B1
Q62	2SD601-QR	(Y) C1
Q63	2SD601-QR	(Y) C1
Q64	2SD601-QR	(Y) C1
Q65	2SB709-Q	(A) C5
Q66	2SD601-QR	(Y) B4
Q67	2SB709-Q	(A) B1
Q68	2SD601-QR	(Y) B2
D1	MA151WA	(MN) B3
D2	MA151WA	(MN) C5
D3	MA151WA	(MN) B6
D4	MA151K	(MH) C2
D5	MA151K	(MH) C3
D6	MA151WK	(MT) C2
D7	MA151K	(MH) C2
D8	MA151K	(MH) B1
D9	MA153	(MC) B1
D10	MA151K	(MH) B1
D11	MA153	(MC) B1
D12	MA151K	(MH) C2

CONTROL BOARD		
D1	MA165	E6
D2	MA165	E6
D3	MA165	E5
D4	MA165	E5
D5	MA165	E4
D6	MA165	E5
D7	MA165	E5
D8	MA165	E4
D9	MA165	E4
D10	MA165	E4
D11	MA165	E4
D12	MA165	E4
D13	MA165	E3
D14	MA165	E3
D15	MA165	F3
D16	MA165	E2
D17	MA165	E3
D18	MA165	E2
D19	MA165	E3
D20	MA165	E3
D21	MA165	D2
D22	MA165	D2
D23	MA165	D2
D24	LN29RD	F6

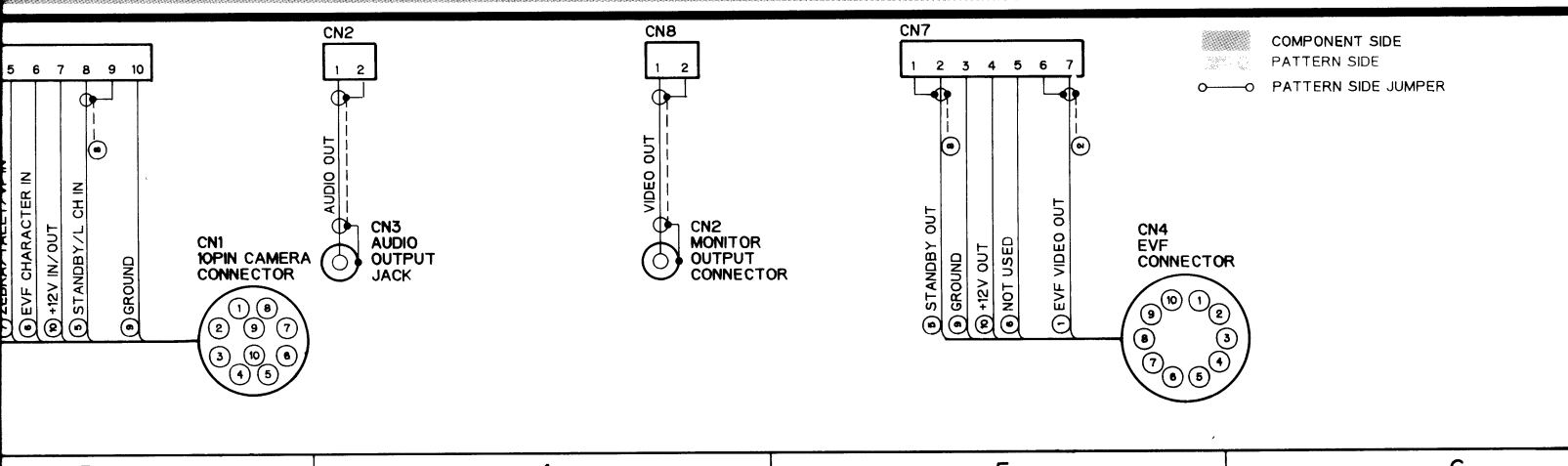
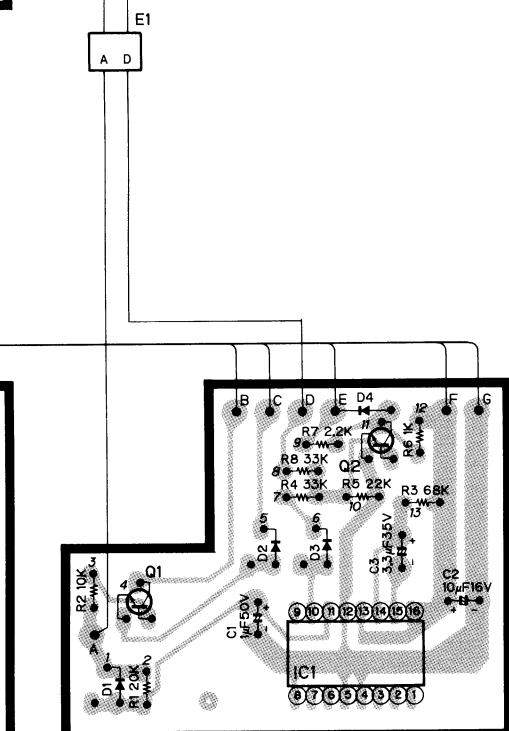
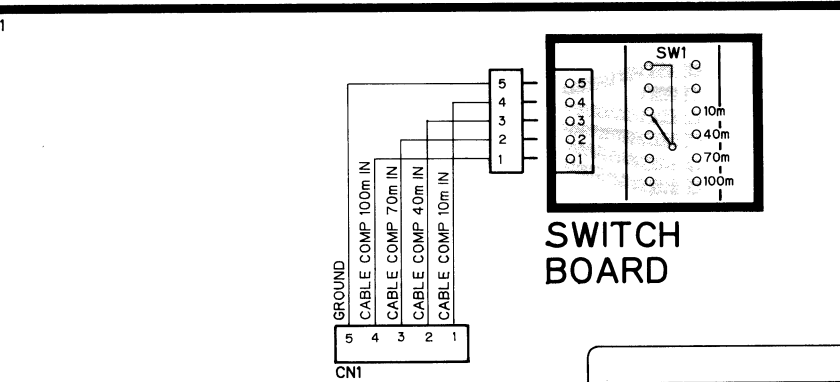
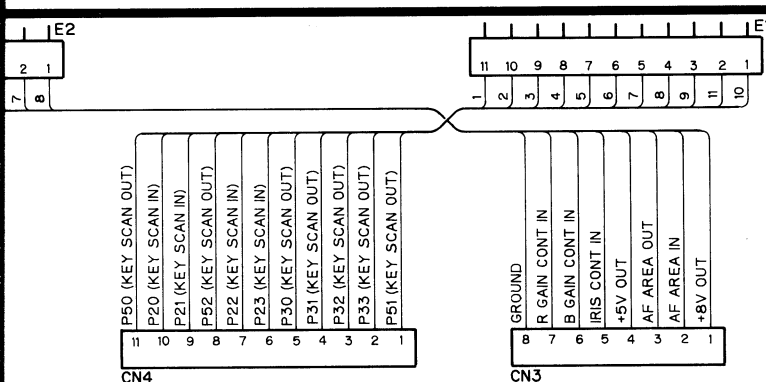
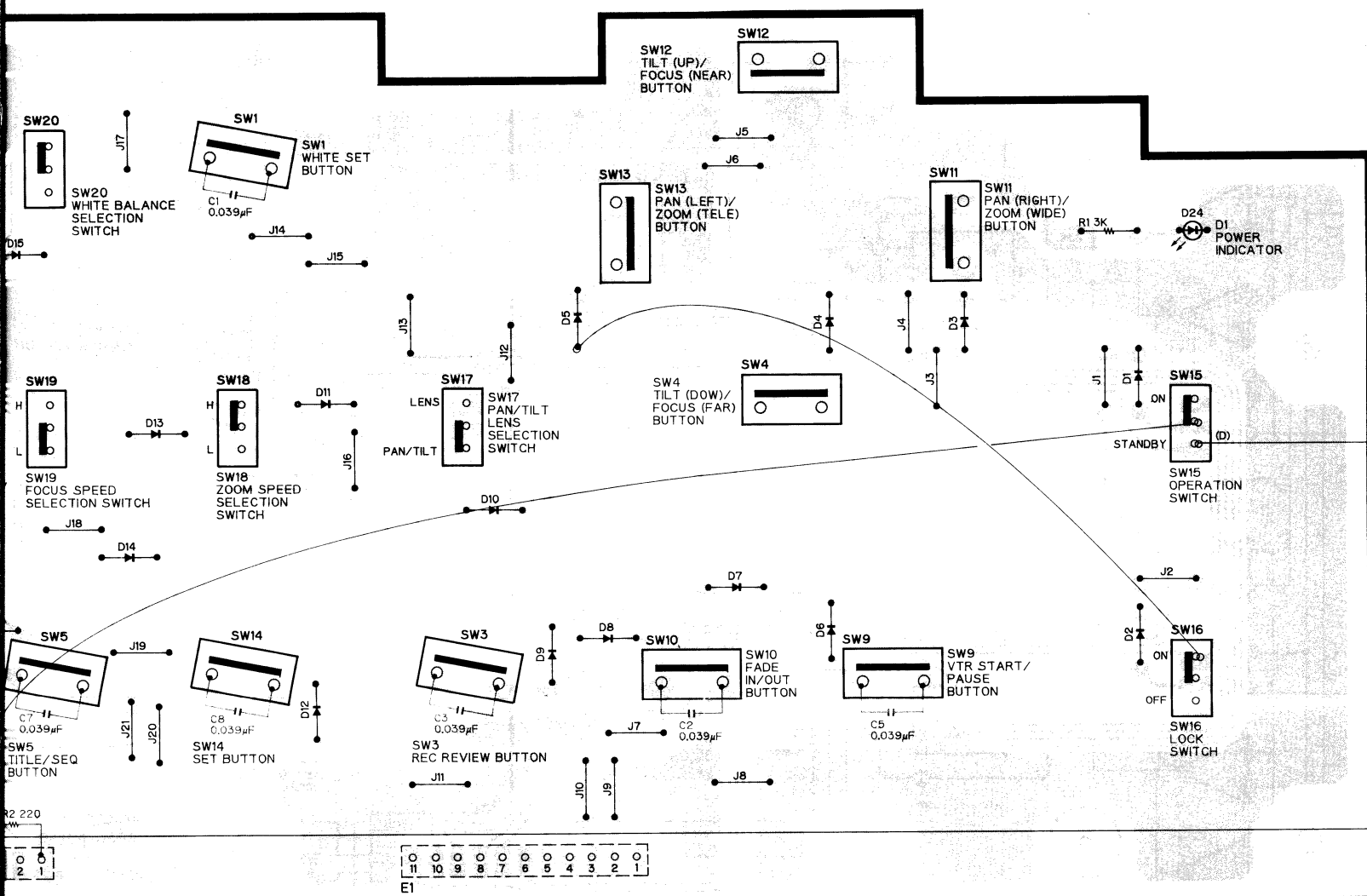
CR SUB BOARD		
IC1	YFMN4538BS	B7
Q1	2SD601-QR	(Y) C7
Q2	2SD601-QR	(Y) C7

CONTROL BOARD

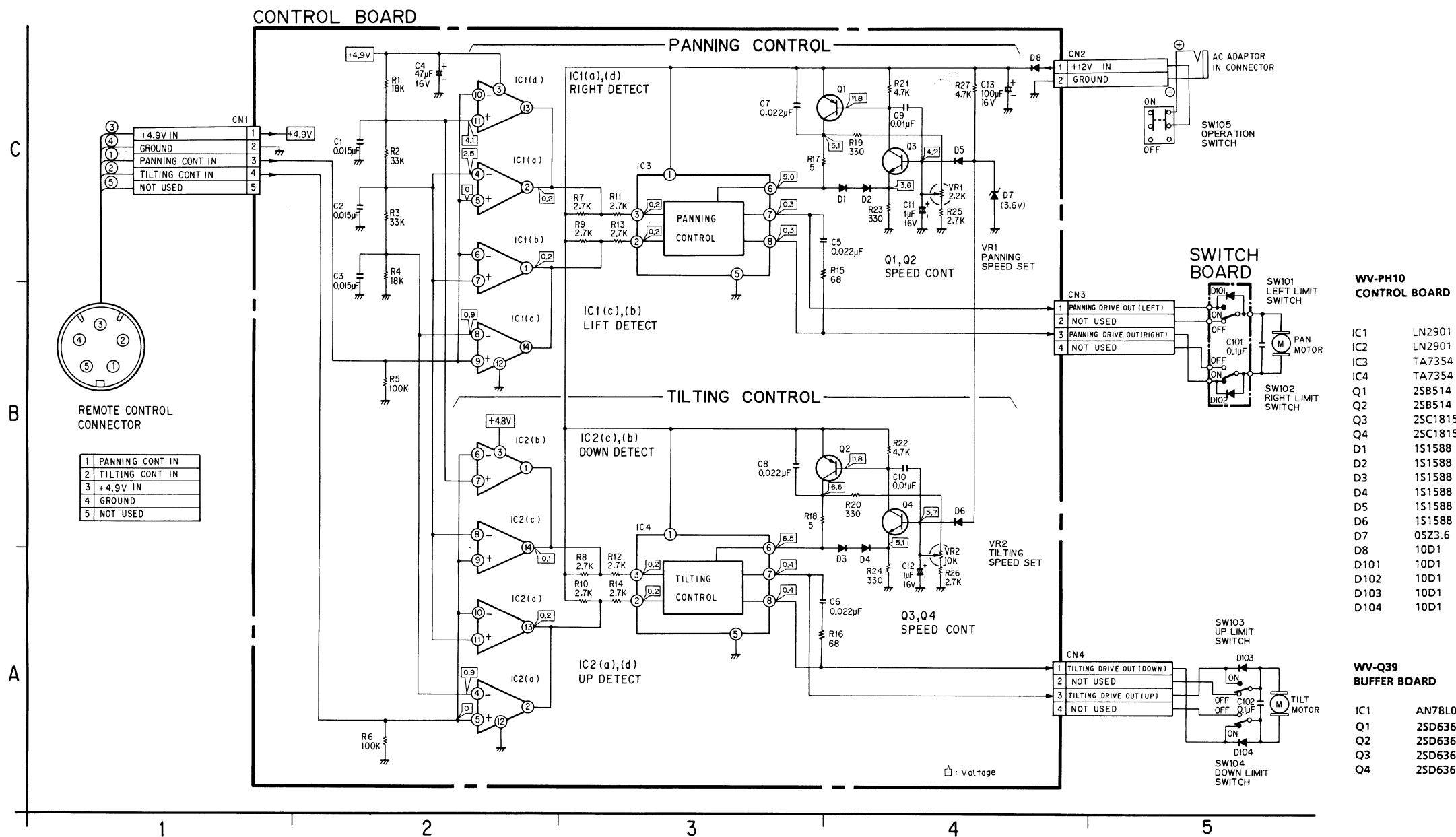
CR MAIN BOARD



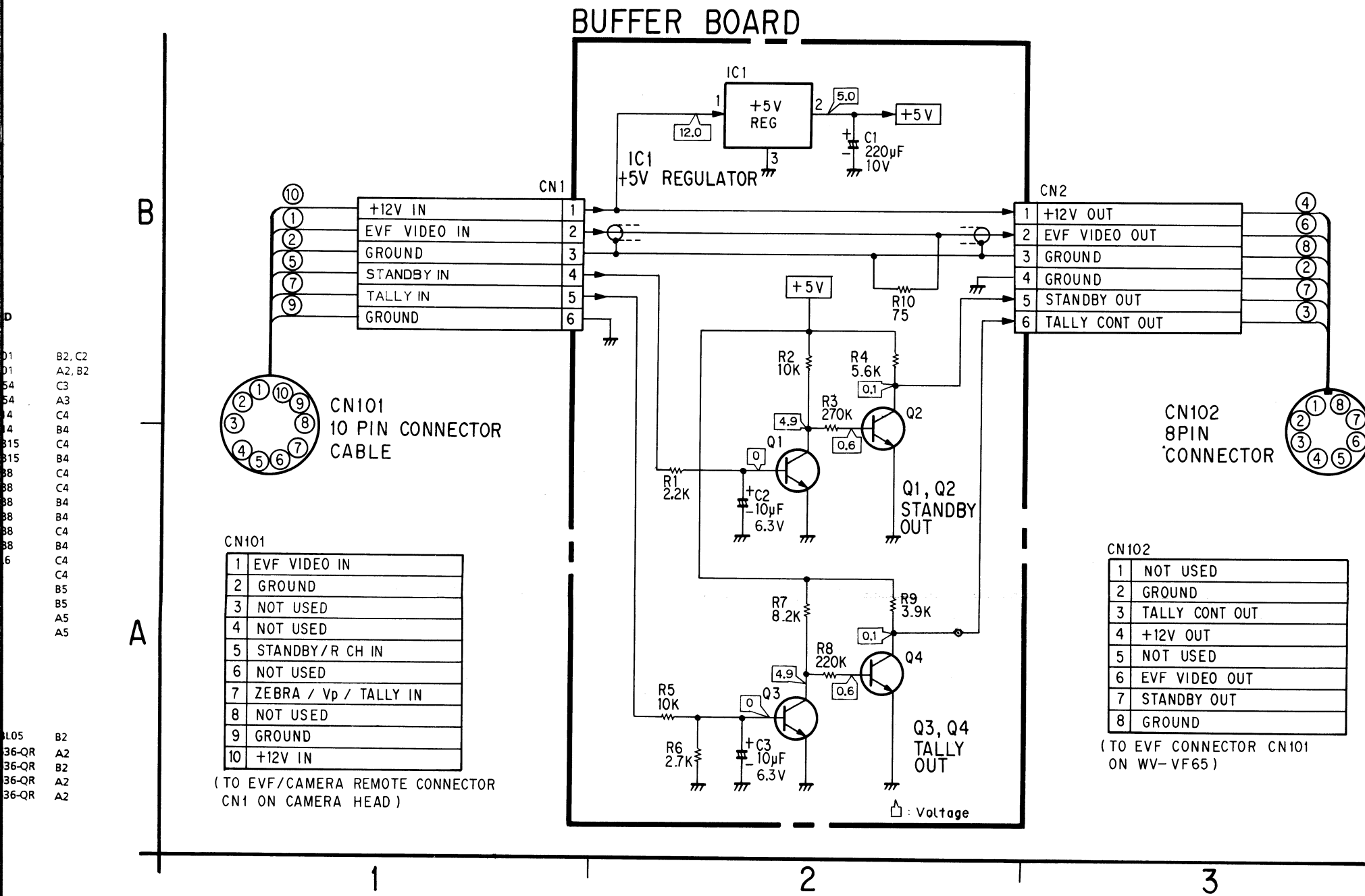
AMERA REMOTE CONTROLLER WV-CR12



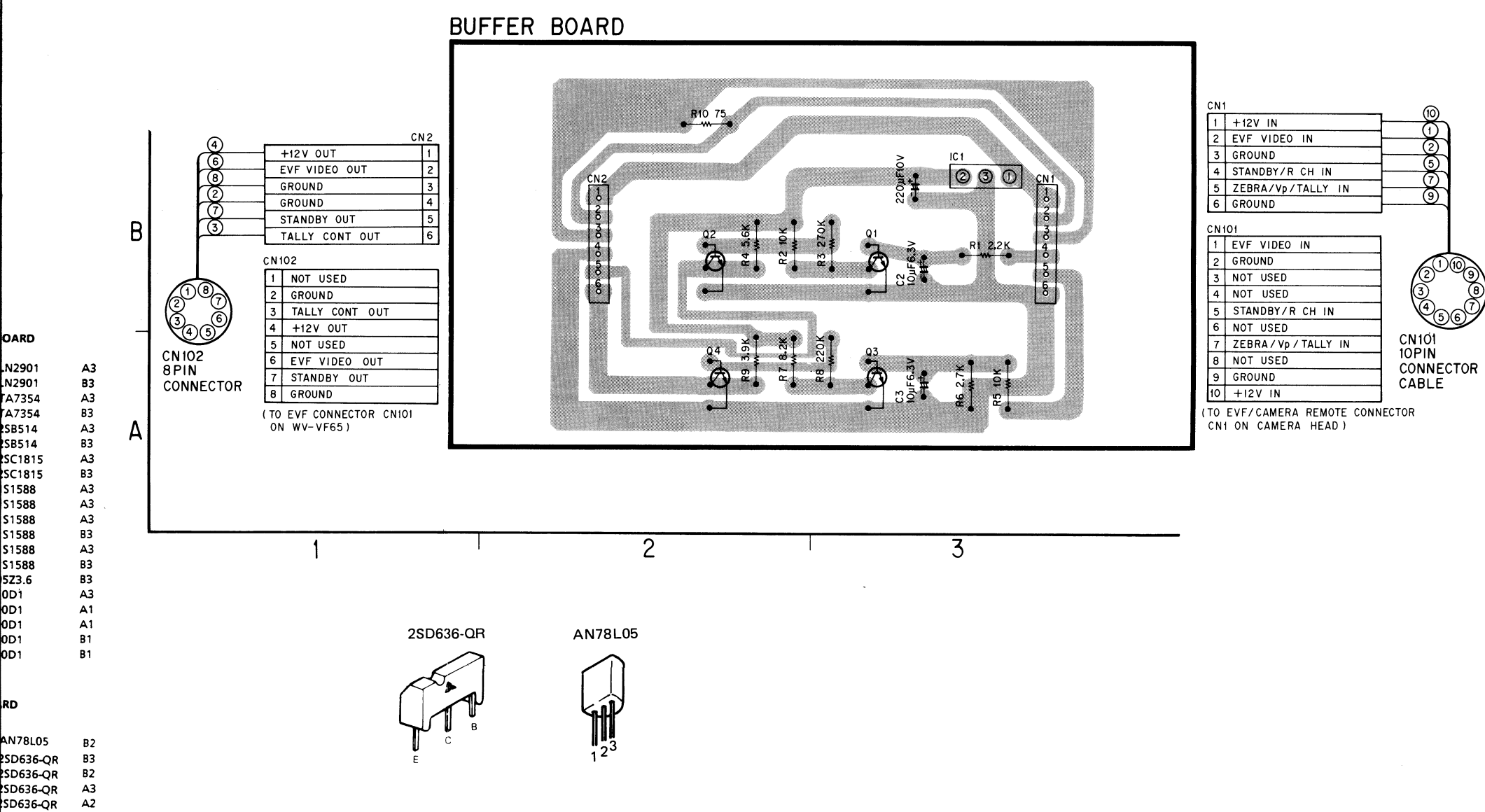
SCHEMATIC DIAGRAM OF PAN/TILT HEAD WV-PH10



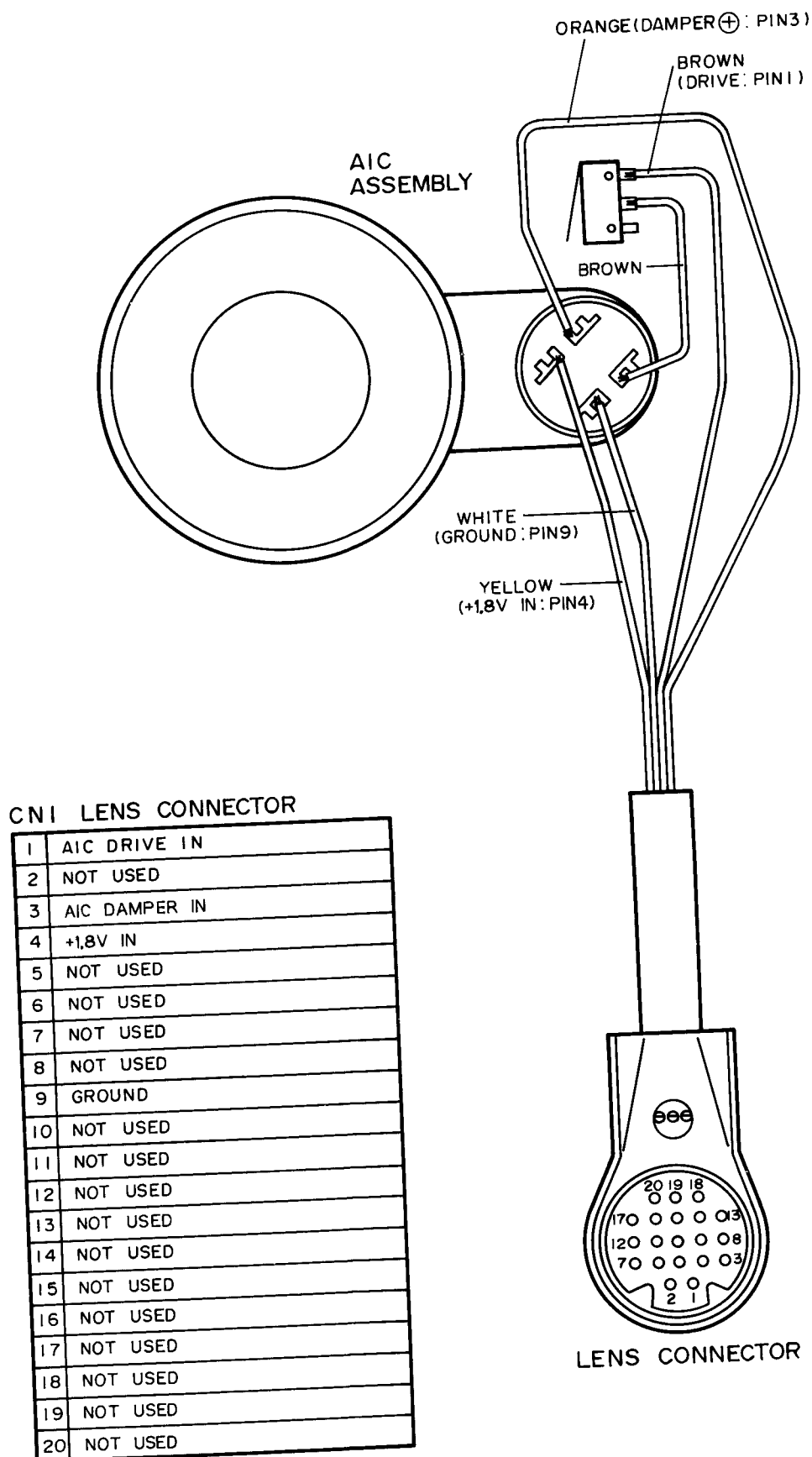
SCHEMATIC DIAGRAM OF MOUNTING BRACKET WV-Q39



CONDUCTOR VIEW OF MOUNTING BRACKET WV-Q39



WIRING DIAGRAM OF 12X AUTOMATIC IRIS STUDIO ZOOM LENS WV-LZ15/12



REPLACEMENT PARTS LIST

Important Notice

1. Components identified by “ Δ ” mark have special characteristics important for safety. When replacing any of these components, use only manufacturer’s specified parts.
2. Components identified by “o” mark are new parts used from this model.
3. Complete printed circuit board assembly is not available as replacement part.

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
REMOTE CONTROL UNIT WV-RC35					
MISCELLANEOUS					
IC7 Q1 D1 D2 R1-4	AN6541 2SB946-PQ LN21RPH YFLN31GCP ERD25FJ750	IC Transistor Power Indicator Tally Indicator Carbon 75 ohms 1/4W	M23 M24 M25 M26	YWA620AER01 YWJ500PWB01A YFV3AA0014A4 YFV7MA0081A4	Insulator Washer(X2) Cushion Dust Proof Parts Safety Label
T1 SW1 SW2 F10 CN1	YFPHB66V042 EST1565T ESD391T oXBA1F20NU100 YWLJ194-1-1	Power Transformer Operation Switch AC/DC Selection Switch Current Fuse 2A 125V Intercom Jack	M27 M28	YFV7MA0180A4 YFV7MA0209A4 YFV7MA0197A4 YFV7MA0015A4	Fuse Rated Label A for NTSC Fuse Rated Label A for PAL Safety Label for NTSC Safety Label for PAL
CN2 CN3 CN4,5 CN6-9 CN10	XLR-4-32F512 YFCNR-1204J YFBNC-BRZ-1 YFRBS-11 YWKP30SVT200	EXT DC Connector TALLY/INTERCOM Connector Video Out Connector GEN-LOCK IN/AUX IN Connector AC Power Cord for NTSC	M29 M30 M31 M33	YFV7MA0231A4 YFV7MB0099A4 YFV7MB0104A4 YFV7MB0103A4	Caution Label Safety Label for WV-RC35USA,PAL Safety Label for WV-RC35Canada Chock Label(X2)
CN11	YWHBS-3-08 YWC0309-08F YWVM0309-08 YWKPGTSA-3 oYFRC35-J12	AC Power Cord for WV-RC35B AC Power Cord for WV-RC35C, WV-RC35N AC Power Cord for WV-RC35G AC Power Cord for WV-RC35NA 14 pin Camera Cable Connector Assy	M33 M34 M35 M36 M37	oYFV7QA1079B4 oYFV7QA1080B4 oYFV7QA1081B4 oYFV7QA1082B4 oYFV7QA1083B4 oYFV7QA1084B4 oYFV7QA1085B4 oYFV7MA0207A4 YFV7MA0219A4 YW-BCG-UR01B	Main Label for WV-RC35USA Main Label for WV-RC35Canada Main Label for WV-RC35B Main Label for WV-RC35G Main Label for WV-RC35C Main Label for WV-RC35N Main Label for WV-RC35NA Fuse RatedLabel for B for PAL Fuse Rated Label C for PAL Earth Label for PAL
E10 M1 M2 M4 M5 M6 M7 M8	YWXN1157-03 oYFV5WA0286A3 oYFV5WB0286A3 oYFV5WA0287A3 oYFV5WB0287A3 oYFV5EA0387A2 YFV5DA0005A4 oYFV2KA0147B2 oYFV2KA0148B3 YFV5RB0004A4	Fuse Holder Panel for NTSC,WV-RC35BCG Panel for WV-RC35N,WV-RC35NA Rear Panel for WV-RC35USA,PAL Rear Panel for WV-RC35Canada Cover Ornament Main Chassis Front Chassis Knob(Red)	M40 M41 M42	YWSR5N4 YWSR6N3-4 YWSR6W-1 YWJ800PWB01	Fuse Change Label for WV-RC35USA Fuse Change Label for WV-RC35Canada Cord Clamp for WV-RC35USA Cord Clamp for WV-RC35Canada Cord Clamp for PAL LED Holder
M9 M10 M11 M12 M13 M14 M15 M16 M20 M21 M22	YFV5RC0004A4 YFV6JA0036B4 YWV3801HR01 oYFV2CA0117A4 oYFV2SA0254A4 YWJ500PAM01 YWJ500PAM02B YWLSR-10 YFV2HA0402A3 oYFV4HA0011A4 oYFV2PA0167A4	Knob(Blue) Push Switch Button Knob(Black) Hold Plate for Power Transformer Mounting Angle Mounting Angle A for Terminal Mounting Angle B Rubber Foot Shield Parts for Power Transformer Lock Shaft Insulator Paper			

SYMBOL NO.	PART NO.	DESCRIPTION		SYMBOL NO.	PART NO.	DESCRIPTION	
MAIN BOARD				R19	YF2116182JT	Carbon	1.8K ohms 1/16W
PCB1	oYFVKZRC35P1A	Printed Circuit Board Assy for NTSC		R20	YF2116332JT	Carbon	3.3K ohms 1/16W
	oYFVKZRC35E1A	Printed C ircuit Board Assy for PAL		R21	YF2116560JT	Carbon	56 ohms 1/16W
	IC1	MN1551CVT3S	IC	R22	YF2116392JT	Carbon	3.9K ohms 1/16W
	IC2	MN4053BS	IC	R23	YF2116122JT	Carbon	1.2K ohms 1/16W
	IC3	M5234FP	IC	R24	YF2116560JT	Carbon	56 ohms 1/16W
	IC4	NJM3414M	IC	R25	YF2116682JT	Carbon	6.8K ohms 1/16W
	IC5	NJM386M	IC	R26	YF2116303JT	Carbon	30K ohms 1/16W
	IC6	MN1280T	IC	R27	YF2116560JT	Carbon	56 ohms 1/16W
	Q1	2SD601-QR	Transistor	R28	YF2116682JT	Carbon	6.8K ohms 1/16W
	Q2,3	2SC2404-CD	Transistor	R29	YF2116303JT	Carbon	30K ohms 1/16W
	Q4	2SA1022-C	Transistor	R30	YF2116622JT	Carbon	6.2K ohms 1/16W
	Q5	2SC2404-CD	Transistor	R31	YF2116103JT	Carbon	10K ohms 1/16W
	Q6-10	2SA1022-C	Transistor	R32	YF2116153JT	Carbon	15K ohms 1/16W
	Q11	2SC2404-CD	Transistor	R33	YF2116203JT	Carbon	20K ohms 1/16W
	Q12,13	2SD601-QR	Transistor	R34	YF2116153JT	Carbon	15K ohms 1/16W
	Q14	2SA1022-C	Transistor	R35	YF2116393JT	Carbon	39K ohms 1/16W
	Q15	2SC2404-CD	Transistor	R36	YF2116153JT	Carbon	15K ohms 1/16W
	Q16,17	2SB709-Q	Transistor	R37-40	YF2116333GT	Carbon	33K ohms 1/16W
Q18	2SD601-QR	Transistor	R41	YF2116560JT	Carbon	56 ohms 1/16W	
Q19	2SB709-Q	Transistor	R42	YF2116392JT	Carbon	3.9K ohms 1/16W	
Q20	2SD601-QR	Transistor	R43	YF2116122JT	Carbon	1.2K ohms 1/16W	
Q21	2SA1022-C	Transistor	R44	YF2116560JT	Carbon	56 ohms 1/16W	
Q22	2SC2404-CD	Transistor	R45	YF2116512JT	Carbon	5.1K ohms 1/16W	
Q23-25	2SA1022-C	Transistor	R46	YF2116560JT	Carbon	56 ohms 1/16W	
Q26	2SC2404-CD	Transistor	R47,48	YF2116750JT	Carbon	75 ohms 1/16W	
Q27,28	2SD601-QR	Transistor	R49	YF2116102GT	Carbon	1K ohms 1/16W	
Q29	2SA1022-C	Transistor	R50	YF2116105JT	Carbon	1M ohms 1/16W	
Q30-32	2SC2404-CD	Transistor	R51	YF2116562JT	Carbon	5.6K ohms 1/16W	
Q33,34	2SD601-QR	Transistor	R52	YF2116223JT	Carbon	22K ohms 1/16W	
Q35	2SB709-Q	Transistor	R53	YF2116562JT	Carbon	5.6K ohms 1/16W	
Q36-44	2SD601-QR	Transistor	R54	YF2116183JT	Carbon	18K ohms 1/16W	
Q45	2SB709-Q	Transistor	R55	YF2116102GT	Carbon	1K ohms 1/16W	
Q46	2SD601-QR	Transistor	R56	YF2116222GT	Carbon	2.2K ohms 1/16W	
Q47	2SB709-Q	Transistor	R57	YF2116223JT	Carbon	22K ohms 1/16W	
D1-8	MA151K	Diode	R58,59	YF2116103JT	Carbon	10K ohms 1/16W	
R1	YF2116273JT	Carbon	27K ohms 1/16W	R60	YF2116163JT	Carbon	16K ohms 1/16W
R2	YF2116103JT	Carbon	10K ohms 1/16W	R61	YF2116682JT	Carbon	6.8K ohms 1/16W
R3	YF2116391JT	Carbon	390 ohms 1/16W	R62	YF2116273JT	Carbon	27K ohms 1/16W
R4	YF2116751JT	Carbon	750 ohms 1/16W	R63	YF2116103JT	Carbon	10K ohms 1/16W
R5	YF2116681JT	Carbon	680 ohms 1/16W	R64	YF2116222GT	Carbon	2.2K ohms 1/16W
R6	YF2116271JT	Carbon	270 ohms 1/16W	R65	YF2116682JT	Carbon	6.8K ohms 1/16W
R7	YF2116182JT	Carbon	1.8K ohms 1/16W	R66	YF2116561JT	Carbon	560 ohms 1/16W
R8	YF2116560JT	Carbon	56 ohms 1/16W	R67	YF2116682JT	Carbon	6.8K ohms 1/16W
R9	YF2116182JT	Carbon	1.8K ohms 1/16W	R68	YF2116561JT	Carbon	560 ohms 1/16W
R10	YF2116222GT	Carbon	2.2K ohms 1/16W	R69	YF2116562JT	Carbon	5.6K ohms 1/16W
R11	YF2116183JT	Carbon	18K ohms 1/16W	R70	YF2116152JT	Carbon	1.5K ohms 1/16W
R12	YF2116272JT	Carbon	2.7K ohms 1/16W	R71	YF2116332JT	Carbon	3.3K ohms 1/16W
R13	YF2116222GT	Carbon	2.2K ohms 1/16W	R72	YF2116432JT	Carbon	4.3K ohms 1/16W
R14	YF2116682JT	Carbon	6.8K ohms 1/16W	R73	YF2116560JT	Carbon	56 ohms 1/16W
R15	YF2116332JT	Carbon	3.3K ohms 1/16W	R74	YF2116122JT	Carbon	1.2K ohms 1/16W
R16	YF2116560JT	Carbon	56 ohms 1/16W	R75	YF2116333GT	Carbon	33K ohms 1/16W
R17	YF2116681JT	Carbon	680 ohms 1/16W	R76	YF2116560JT	Carbon	56 ohms 1/16W
R18	YF2116560JT	Carbon	56 ohms 1/16W	R77	YF2116682JT	Carbon	6.8K ohms 1/16W
				R78	YF2116333GT	Carbon	33K ohms 1/16W

SYMBOL NO.	PART NO.	DESCRIPTION		SYMBOL NO.	PART NO.	DESCRIPTION	
R79	YF2116101JT	Carbon	100 ohms 1/16W	R141	YF2116752JT	Carbon	7.5K ohms 1/16W
R80	YF2116562JT	Carbon	5.6K ohms 1/16W	R142	YF2116102GT	Carbon	1K ohms 1/16W
R81	YF2116472JT	Carbon	4.7K ohms 1/16W	R143	YF2116823JT	Carbon	82K ohms 1/16W
R82	YF2116243JT	Carbon	24K ohms 1/16W	R144	YF2116560JT	Carbon	56 ohms 1/16W
R83	YF2116560JT	Carbon	56 ohms 1/16W	R145	YF2116101JT	Carbon	100 ohms 1/16W
R84	YF2116333GT	Carbon	33K ohms 1/16W	R146	YF2116104JT	Carbon	100K ohms 1/16W
R85	YF2116392JT	Carbon	3.9K ohms 1/16W	R147	YF2116560JT	Carbon	56 ohms 1/16W
R86	YF2116222GT	Carbon	2.2K ohms 1/16W	R149,150	YF2116473GT	Carbon	47K ohms 1/16W
R87	YF2116103JT	Carbon	10K ohms 1/16W	R151	YF2116103JT	Carbon	10K ohms 1/16W
R88	YF2116101JT	Carbon	100 ohms 1/16W	R152	YF2116473GT	Carbon	47K ohms 1/16W
R89	YF2116680JT	Carbon	68 ohms 1/16W	R153	YF2116103JT	Carbon	10K ohms 1/16W
R90	YF2116750JT	Carbon	75 ohms 1/16W	R154	YF2116473GT	Carbon	47K ohms 1/16W
R91	YF2116822JT	Carbon	8.2K ohms 1/16W	R155	YF2116333GT	Carbon	33K ohms 1/16W
R92	YF2116123JT	Carbon	12K ohms 1/16W	R156	YF2116562JT	Carbon	5.6K ohms 1/16W
R93,94	YF2116821GT	Carbon	820 ohms 1/16W	R157	YF2116103JT	Carbon	10K ohms 1/16W
R95	YF2116101JT	Carbon	100 ohms 1/16W	R158	YF2116561JT	Carbon	560 ohms 1/16W
R96	YF2116272JT	Carbon	2.7K ohms 1/16W	R159	YF2116101JT	Carbon	100 ohms 1/16W
R97	YF2116561JT	Carbon	560 ohms 1/16W	R160	YF2116750JT	Carbon	75 ohms 1/16W
R98	YF2116332JT	Carbon	3.3K ohms 1/16W	R161	YF2116333GT	Carbon	33K ohms 1/16W
R99,100	YF2116560JT	Carbon	56 ohms 1/16W	R162	YF2116562JT	Carbon	5.6K ohms 1/16W
R101	YF2116182JT	Carbon	1.8K ohms 1/16W	R163	YF2116103JT	Carbon	10K ohms 1/16W
R102	YF2116122JT	Carbon	1.2K ohms 1/16W	R164	YF2116561JT	Carbon	560 ohms 1/16W
R103	YF2116392JT	Carbon	3.9K ohms 1/16W	R165	YF2116101JT	Carbon	100 ohms 1/16W
R104	YF2116560JT	Carbon	56 ohms 1/16W	R166	YF2116750JT	Carbon	75 ohms 1/16W
R105	YF2116432JT	Carbon	4.3K ohms 1/16W	R167	YF2116223JT	Carbon	22K ohms 1/16W
R106	YF2116392JT	Carbon	3.9K ohms 1/16W	R168	YF2116333GT	Carbon	33K ohms 1/16W
R107	YF2116222GT	Carbon	2.2K ohms 1/16W	R169,170	YF2116103JT	Carbon	10K ohms 1/16W
R108	YF2116103JT	Carbon	10K ohms 1/16W	R171	YF2116122JT	Carbon	1.2K ohms 1/16W
R109	YF2116101JT	Carbon	100 ohms 1/16W	R172	YF2116331JT	Carbon	330 ohms 1/16W
R110	YF2116680JT	Carbon	68 ohms 1/16W	R173	YF2116562JT	Carbon	5.6K ohms 1/16W
R111	YF2116750JT	Carbon	75 ohms 1/16W	R174	YF2116101JT	Carbon	100 ohms 1/16W
R114	YF2116473GT	Carbon	47K ohms 1/16W	R175	YF2116332JT	Carbon	3.3K ohms 1/16W
R115	YF2116912JT	Carbon	9.1K ohms 1/16W	R176	YF2116822JT	Carbon	8.2K ohms 1/16W
R116,117	YF2116472JT	Carbon	4.7K ohms 1/16W	R177	YF2116103JT	Carbon	10K ohms 1/16W
R118	YF2116102GT	Carbon	1K ohms 1/16W	R178	YF2116152JT	Carbon	1.5K ohms 1/16W
R119-121	YF2116473GT	Carbon	47K ohms 1/16W	R179	YF2116750JT	Carbon	75 ohms 1/16W
R122	YF2116222GT	Carbon	2.2K ohms 1/16W	R192,193	YF2116182JT	Carbon	1.8K ohms 1/16W
R123	YF2116183JT	Carbon	18K ohms 1/16W	VR1	EVN8ACA00BE3	Variable Resistor	2.2K ohms
R124	YF2116332JT	Carbon	3.3K ohms 1/16W	VR2	RK097115KB	Variable Resistor	5K ohms
R125	YF2116222GT	Carbon	2.2K ohms 1/16W	Z1	YFRKM8LFW154	Block Resistor	
R126	YF2116101JT	Carbon	100 ohms 1/16W	C1	ECEA1AKS470	Electrolytic	47 μ F 10V
R127	YF2116201JT	Carbon	200 ohms 1/16W	C2,3	ECEA0JKS101	Electrolytic	100 μ F 6.3V
R128	YF2116183JT	Carbon	18K ohms 1/16W	C4	YF400100CHDT	Ceramic	10 pF
R129	YF2116332JT	Carbon	3.3K ohms 1/16W	C5	YF400300CHJT	Ceramic	30 pF
R130	YF2116102GT	Carbon	1K ohms 1/16W	C6	YF400560CHJT	Ceramic	56 pF
R131	YF2116101JT	Carbon	100 ohms 1/16W	C7	YF400180CHJT	Ceramic	18 pF
R132	YF2116183JT	Carbon	18K ohms 1/16W	C8	YF400220CHJT	Ceramic	22 pF
R133	YF2116201JT	Carbon	200 ohms 1/16W	C9,10	YF400180CHJT	Ceramic	18 pF
R134	YF2116332JT	Carbon	3.3K ohms 1/16W	C11	ECEA1CKS100	Electrolytic	10 μ F 16V
R135	YF2116102GT	Carbon	1K ohms 1/16W	C12	ECEA1AKS470	Electrolytic	47 μ F 10V
R136	YF2116183JT	Carbon	18K ohms 1/16W	C13,14	ECEA1ASS102	Electrolytic	1000 μ F 10V
R137	YF2116332JT	Carbon	3.3K ohms 1/16W	C15	ECEA1AKS470	Electrolytic	47 μ F 10V
R138	YF2116102GT	Carbon	1K ohms 1/16W	C16	YF400101CHJT	Ceramic	100 pF
R139	YF2116101JT	Carbon	100 ohms 1/16W	C17	YF426224FZS	Ceramic	0.22 μ F 50V
R140	YF2116102GT	Carbon	1K ohms 1/16W	C18	YF400680CHJT	Ceramic	68 pF $\square$ H
				C19	YF400222XKT	Ceramic	2200 p F

SYMBOL NO.	PART NO.	DESCRIPTION		SYMBOL NO.	PART NO.	DESCRIPTION	
C20	ECEA1AKS470	Electrolytic	47 μ F 10V	CN6-11	EMCS0250Z	2 pin Jack Male	
C21	YF400180CHJT	Ceramic	18 pF	CN12	EMCS0352M	3 pin Jack Male	
C22	YF400820CHJT	Ceramic	82 pF	CN13	EMCS0450Z	4 pin Jack Male	
C23	ECEA0JKS101	Electrolytic	100 μ F 6.3V	CN14	EMCS0252M	2 pin Jack Male	
C24	YF400220CHJT	Ceramic	22 pF	POWER BOARD			
C25,26	YF400150CHJT	Ceramic	15 pF				
C27	YF400100CHDT	Ceramic	10 pF				
C28	YF400220CHJT	Ceramic	22 pF	PCB2			
C29	ECEA1CKS100	Electrolytic	10 μ F 16V				
C30	ECEA1AKS470	Electrolytic	47 μ F 10V				
C31	ECEA1AU471	Electrolytic	470 μ F 10V	IC1	o YFVKZRC35P2A	Printed Circuit Board Assy for NTSC	
C32	ECEA1AKS470	Electrolytic	47 μ F 10V		o YFVKZRC35E2A	Printed Circuit Board Assy for PAL	
C33	YF400820CHJT	Ceramic	82 pF	Q2	NJM3524D	IC	
C34	ECEA0JKS101	Electrolytic	100 μ F 6.3V	Q3	2SC1384-QRS	Transistor	
C35	YF400101CHJT	Ceramic	100 pF		2SA684-QR	Transistor	
C36	ECEA1CKS100	Electrolytic	10 μ F 16V	D1	D5FB2052	Diode	
C37	ECEA1AKS470	Electrolytic	47 μ F 10V	D2	ESAB82-004	Diode	
C38	ECEA1AU471	Electrolytic	470 μ F 10V	D4	RM4ZLFK1	Diode	
C39	ECEA1AKS470	Electrolytic	47 μ F 10V	R1	ERD10TJ102	Carbon	1K ohms 1/8W
C40	ECEA1CKS470	Electrolytic	47 μ F 16V	R2-4	ERD10TJ472	Carbon	4.7K ohms 1/8W
C41	ECEA1CKN100	Electrolytic	10 μ F 16V	R6	ERD10TJ273	Carbon	27K ohms 1/8W
C42	YF400103XKT	Ceramic	0.01 μ F	R7	ERG2ANJ470	Metal	47 ohms 2W
C43	ECEA1CKS100	Electrolytic	10 μ F 16V	R8	ERG2ANJ102H	Metal	1K ohms 2W
C44	ECEA1AU221	Electrolytic	220 μ F 10V	R9	ERG2ANJ621H	Metal	620 ohms 2W
C45	ECEA1CKN100	Electrolytic	10 μ F 16V	VR1	EVN8ACA00BE3	Variable Resistor	2.2K ohms
C46	ECEA1CKS100	Electrolytic	10 μ F 16V	C1	ECKD2H103KB2	Ceramic	0.01 μ F 500V
C47	ECEA1AU221	Electrolytic	220 μ F 10V	C2	ECES1HU472R	Electrolytic	4700 μ F 50V
C48	ECEA1CKN100	Electrolytic	10 μ F 16V	C3	ECEA1AK470	Electrolytic	47 μ F 10V
C49,50	ECEA1CKS100	Electrolytic	10 μ F 16V	C4	ECCF1H331JC	Ceramic	330 pF
C51	ECEA1AKK100	Electrolytic	10 μ F 10V	C5	ECEA1HF101V	Electrolytic	100 μ F 50V
C52	YF400473FZT	Ceramic	0.047 μ F	C6	ECKW1H222KB5	Ceramic	2200 pF 50V
C53	ECEA1CU101	Electrolytic	100 μ F 16V	C7	ECEA1EK100	Electrolytic	10 μ F 25V
C54	ECEA1HKS22	Electrolytic	0.22 μ F 50V	C8	ECQM1H153JZ	Plastic	0.015 μ F 50V
C55	YF400332XKT	Ceramic	3300 pF	C9,10	ECET25R2225U	Electrolytic	2200 μ F 25V
C56,57	ECEA1AKS470	Electrolytic	47 μ F 10V	C12,13	ECKD2H103KB2	Ceramic	0.01 μ F 100V
C58	YF400473FZT	Ceramic	0.047 μ F	C14	ECEA1EK100	Electrolytic	10 μ F 25V
C59	ECEA1AU101	Electrolytic	100 μ F 10V	C15	ECQM1H104JZ	Plastic	0.1 μ F 50V
C60	ECEA1AKN470	Electrolytic	47 μ F 10V	L1	YF15PF470K	Coil	47 μ H
C61	ECEA1AU101	Electrolytic	100 μ F 10V	L2	ELC18E006	Coil	330 μ H
C62	ECEA1AKS470	Electrolytic	47 μ F 10V	L3	YF15PF470K	Coil	47 μ H
C63	YF400010CHDT	Ceramic	1 pF	F1	YFSP73A	Current Fuse	3A 125V for NTSC
C64,65	ECEA1AU101	Electrolytic	100 μ F 10V		YFICPF75	Current Fuse	3.15A 250V for PAL
C66	YF400010CHDT	Ceramic	1 pF	F2	XBA1C30NU100	Current Fuse	3A 125V for NTSC
C71	ECEA1AKS470	Electrolytic	47 μ F 10V		XBA2C31ET0A	Current Fuse	3.15A 250V for PAL
C72	ECEA1VKS4R7	Electrolytic	4.7 μ F 35V	CN1,2-JM	EMCS0352M	3 pin Jack Male	
L1-4	EL05S18R2K	Coil	8.2 μ H	E2	YWSN5053	Fuse Holder	
SW1	YFSBU1024	Rotary Switch		M17	o YFV2HA0399A4	Shield Case	
X1	YFEF0-FC4004	Oscillator		M18	o YFV2HA0400A4	Shield Cover A	
CF1	YFSTR4043	Filter for NTSC		M19	o YFV2HA0401A4	Shield Cover B	
	YFSTR4044	Filter for PAL					
J148	YF21160R00T	Jumper Resistor					
CN1-JM	EMCS0850Z	5 pin Jack Male					
CN2-JM	EMCS1050Z	10 pin Jack Male					
CN3,4-JM	YFS7PS2T2EF	7 pin Jack Male					
CN5-JM	EMCS0350Z	3 pin Jack Male					

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
CONTROL BOARD			RCU ADAPTOR WV-AD37		
PCB3	o YFVKZRC35P3A	Printed Circuit Board Assy	Q21	2SC1398-QR	Transistor
D1-3	MA165	Diode	SW1	YFSSB022L6NR	Power Selection Switch
R1	ERD10TJ103	Carbon 10K ohms 1/8W	CN1,2	YFBNC-BRZ-1	BNC Connector
R2	ERD10TJ203	Carbon 20K ohms 1/8W	CN3	YWLJ194-1-1	Intercom Jack
R3	ERD10TJ103	Carbon 10K ohms 1/8W	CN4	YFAD37RCU14P	14Pin RCU Connector
R4	ERD10TJ203	Carbon 20K ohms 1/8W	CN5	YFXLR432F512	4Pin External/DC Input Connector
R7-10	YF2116681JT	Carbon 680 ohms 1/16W	M1	o YFV5EA0379A1	Cover
R11	ERD10TJ161	Carbon 160 ohms.1/8W	M2	o YFV5WA0281A4	Right Side Panel
R12	ERD10TJ221	Carbon 220 ohms 1/8W	M3	o YFV5WA0279A4	Panel-1
VR1-4	YFRK12K11CC	Variable Resistor 10K ohms	M4	o YFV5WA0280A4	Panel-2
VR5	YFRK12K1KBCC	Variable Resistor 1K ohms	M5	△ o YFV7QA1075A4	Main Label for NTSC
VR6	EVJ1KAS10B13	Variable Resistor 1K ohms		△ o YFV7QA1102A4	Main Label for WV-AD37E
VR7	EVJ1KAS10B14	Variable Resistor 10K ohms		△ o YFV7QA1103A4	Main Label for WV-AD37N
SW1	YFSPH222A	Push Switch	M6	△ o YFV7MA0106A4	Caution Label for NTSC
SW3-6	YFSSA042L12	Slide Switch		△ o YFV7MA0099A4	Caution Label for PAL
ACCESSORY PARTS/PACKAGING PARTS			M7	△ o YFV7SA0169B4	Switch Label
CN50	o YFCNR-1204P	4 pin Connector	M8	△ o YFV7MA0162A4	Fuse Label for NTSC
M51	o YFV8QA1045AN	Operating Instruction for WV-RC35USA		△ o YFV7MA0219A4	Fuse Label for PAL
	o YFV8QA1046AN	Operating Instruction for WV-RC35Canada	M9	△ o YWS-CCSRB01	Fuse Change Label
	o YFV8QA1047AN	Operating Instruction for WV-RC35BCG	M10	o YFV3CA0071A4	Mounting Angle for Intercom Jack
	o YFV8QA1050AN	Operating Instruction for WV-RC35N	M11	o YFV2KA0145A3	Connector Chassis
	o YFV8QA1090AN	Operating Instruction for WV-RC35NA	M12	o YFV2SA0251A4	Mounting Angle
M52	VQA0120-3	Warranty Card for WV-RC35USA	M13	o YFV5RA0048A4	Intercom Label Knob
	VQA0054-5	Warranty Card for WV-RC35Canada	M14	o YFV7MA0103A4	Chock Label for NTSC
	19998700419	Warranty Card for WV-RC35G	M15	o YFV5EA0383A2	Mounting Base
M53	YFV8UA0004A4	Warranty Card for WV-RC35NA	M16	o YFV6JA0012A4	Button
	YVW22XPRB99K	Service Center List for WV-RC35USA	M17	o YFV2CA0114A4	Hold Plate
M54	△ YFV8SA0009CN	Safety Guide for WV-RC35USA	M18	o YFV6GA0049A4	Mounting Plate
M55	XZB26X40C05	Polyethylene Bag for Printed	M19	o YFV6GA0050A4	Blank Plate
M56	XZB35X50C05	Polyethylene Bag for RCU	M20	o YFV4RA0009A4	Lock Lever
M57	YWT20X35C03	Polyethylene Bag for Connector	M21	o YFV4JA0084A4	Spring-A
M60	o YFV9CA0852AN	Packaging for WV-RC35USA, WV-RC35N, WV-RC35NA	M22	o YFV4JA0130A4	Spring Plate
	o YFV9CA0903AN	Packaging for WV-RC35Canada	M23	o YFV4JA0131A4	Spring-B
	o YFV9CA0904AN	Packaging for WV-RC35BCG	M24	o YFV5VA0045A4	Pad
M61	YWS-RB032	Packing Label for WV-RC35USA	M25	o YFV2EA0045A4	Mounting Guide for Connector
			M26	o YFV5EA0406A4	Stopper Pin
			M27	o YFV2EA0046A4	Mounting Plate
			MAIN BOARD		
			PCB1-1	o YFVKBAD37P1A	Printed Circuit Board Assy for NTSC
			IC3	o YFVKBAD37E1A	Printed Circuit Board Assy for PAL
			IC4	MN4053BS	IC
			IC5	M5234FP	IC
				NJM3414M	IC
			IC101	MN4011BS	IC
			IC102	MN4516BS	IC
			IC103	NJM4560M	IC
			IC104	NJM3414M	IC
			IC105	MN4053BS	IC
			IC106	AN2020S	IC
			Q1	2SC2404-CD	Transistor

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
Q2-4	2SD601-QR	Transistor	R70,71	YF2116103JT	Carbon 10K ohms 1/16W
Q5	2SC2404-CD	Transistor	R72	YF2116622JT	Carbon 6.2K ohms 1/16W
Q6	2SB709-Q	Transistor	R73,74	YF2116822JT	Carbon 8.2K ohms 1/16W
Q7-9	2SC2404-CD	Transistor	R75	YF2116332JT	Carbon 3.3K ohms 1/16W
Q18	2SB709-Q	Transistor	R76	YF2116102GT	Carbon 1K ohms 1/16W
Q19	2SD601-QR	Transistor	R77	YF2116103JT	Carbon 10K ohms 1/16W
Q20,101	2SB709-Q	Transistor	R78	YF2116223JT	Carbon 22K ohms 1/16W
Q102,103	2SB709-Q	Transistor	R79	YF2116681JT	Carbon 680 ohms 1/16W
Q104	2SD601-QR	Transistor	R80,81	YF2116103JT	Carbon 10K ohms 1/16W
Q105-109	2SC2404-CD	Transistor	R82	YF2116102GT	Carbon 1K ohms 1/16W
Q110-115	2SD601-QR	Transistor	R83	YF2116202JT	Carbon 2K ohms 1/16W
Q116-119	2SC2404-CD	Transistor	R84	YF2116750JT	Carbon 75 ohms 1/16W
Q120	2SB709-Q	Transistor	R85	YF2116682JT	Carbon 6.8K ohms 1/16W
Q121,122	2SC2404-CD	Transistor	R86	YF2116103JT	Carbon 10K ohms 1/16W
Q123,124	2SC2404-CD	Transistor for PAL	R87	YF2116222GT	Carbon 2.2K ohms 1/16W
Q125	2SD601-QR	Transistor for PAL	R88	YF2116332JT	Carbon 3.3K ohms 1/16W
Q126	2SB709-Q	Transistor	R89	YF2116750JT	Carbon 75 ohms 1/16W
Q127,128	2SD601-QR	Transistor	R90	YF2116104JT	Carbon 100K ohms 1/16W
Q129	2SB709-Q	Transistor	R98	YF2116100JT	Carbon 10 ohms 1/16W
Q130	2SC2404-CD	Transistor	R99	YF2116332JT	Carbon 3.3K ohms 1/16W
Q131-133	2SD601-QR	Transistor	R100	YF2116123JT	Carbon 12K ohms 1/16W
Q134	2SB709-Q	Transistor	R101	YF2116222GT	Carbon 2.2K ohms 1/16W
Q135	2SD601-QR	Transistor	R102,103	YF2116183JT	Carbon 18K ohms 1/16W
R1	YF2116153JT	Carbon 15K ohms 1/16W	R104-106	YF2116223JT	Carbon 22K ohms 1/16W
R2	YF2116562JT	Carbon 5.6K ohms 1/16W	R107-109	YF2116272JT	Carbon 2.7K ohms 1/16W
R3	YF2116222GT	Carbon 2.2K ohms 1/16W	R110	YF2116182JT	Carbon 1.8K ohms 1/16W
R4	YF2116102GT	Carbon 1K ohms 1/16W	R111	YF2116221JT	Carbon 220 ohms 1/16W
R5	YF2116332JT	Carbon 3.3K ohms 1/16W	R112,113	YF2116132JT	Carbon 1.3K ohms 1/16W
R6,7	YF2116272JT	Carbon 2.7K ohms 1/16W	R114	YF2116271JT	Carbon 270 ohms 1/16W
R8	YF2116105JT	Carbon 1M ohms 1/16W	R115	YF2116221JT	Carbon 220 ohms 1/16W
R9	YF2116102GT	Carbon 1K ohms 1/16W	R116	YF2116392JT	Carbon 3.9K ohms 1/16W
R10	YF2116223JT	Carbon 22K ohms 1/16W	R117	YF2116272JT	Carbon 2.7K ohms 1/16W
R11	YF2116332JT	Carbon 3.3K ohms 1/16W	R118	YF2116562JT	Carbon 5.6K ohms 1/16W
R12	YF2116103JT	Carbon 10K ohms 1/16W	R119	YF2116123JT	Carbon 12K ohms 1/16W
R13,14	YF2116222GT	Carbon 2.2K ohms 1/16W	R120	YF2116103JT	Carbon 10K ohms 1/16W
R15,16	YF2116102GT	Carbon 1K ohms 1/16W	R121	YF2116393JT	Carbon 39K ohms 1/16W for NTSC
R17	YF2116101JT	Carbon 100 ohms 1/16W		YF2116683JT	Carbon 68K ohms 1/16W for PAL
R18	YF2116103JT	Carbon 10K ohms 1/16W	R122	YF2116152JT	Carbon 1.5K ohms 1/16W
R19,20	YF2116102GT	Carbon 1K ohms 1/16W	R123-125	YF2116103JT	Carbon 10K ohms 1/16W
R21	YF2116103JT	Carbon 10K ohms 1/16W	R126	YF2116272JT	Carbon 2.7K ohms 1/16W
R53	YF2116203JT	Carbon 20K ohms 1/16W	R127	YF2116222GT	Carbon 2.2K ohms 1/16W
R54,55	YF2116103JT	Carbon 10K ohms 1/16W	R128,129	YF2116102GT	Carbon 1K ohms 1/16W
R56	YF2116203JT	Carbon 20K ohms 1/16W	R130	YF2116333GT	Carbon 33K ohms 1/16W
R57	YF2116222GT	Carbon 2.2K ohms 1/16W	R131	YF2116122JT	Carbon 1.2K ohms 1/16W
R58	YF2116103JT	Carbon 10K ohms 1/16W	R132	YF2116182JT	Carbon 1.8K ohms 1/16W
R59	YF2116562JT	Carbon 5.6K ohms 1/16W	R133	YF2116102GT	Carbon 1K ohms 1/16W
R60	YF2116302JT	Carbon 3K ohms 1/16W	R134	YF2116183JT	Carbon 18K ohms 1/16W
R61	YF2116332JT	Carbon 3.3K ohms 1/16W	R135	YF2116112JT	Carbon 1.1K ohms 1/16W
R62	YF2116562JT	Carbon 5.6K ohms 1/16W	R136	YF2116682JT	Carbon 6.8K ohms 1/16W
R63	YF2116392JT	Carbon 3.9K ohms 1/16W	R137	YF2116221JT	Carbon 220 ohms 1/16W
R64	YF2116102GT	Carbon 1K ohms 1/16W	R138	YF2116473GT	Carbon 47K ohms 1/16W for NTSC
R65	YF2116183JT	Carbon 18K ohms 1/16W	R139	YF2116821GT	Carbon 820 ohms 1/16W
R66	YF2116562JT	Carbon 5.6K ohms 1/16W	R140	YF2116122JT	Carbon 1.2K ohms 1/16W
R67	YF2116392JT	Carbon 3.9K ohms 1/16W			
R68,69	YF2116682JT	Carbon 6.8K ohms 1/16W			

SYMBOL NO.	PART NO.	DESCRIPTION		SYMBOL NO.	PART NO.	DESCRIPTION	
R141	YF2116153JT	Carbon	15K ohms 1/16W	R191	YF2116392JT	Carbon	3.9K ohms 1/16W for NTSC
R142	YF2116392JT	Carbon	3.9K ohms 1/16W		YF2116391JT	Carbon	390 ohms 1/16W for PAL
R143	YF2116512JT	Carbon	5.1K ohms 1/16W	R192,193	YF2116102GT	Carbon	1K ohms 1/16W
R144	YF2116122JT	Carbon	1.2K ohms 1/16W	R194	YF2116222GT	Carbon	2.2K ohms 1/16W for NTSC
R145,146	YF2116101JT	Carbon	100 ohms 1/16W		YF2116821GT	Carbon	820 ohms 1/16W for PAL
R147	YF2116333GT	Carbon	33K ohms 1/16W	R195	YF2116103JT	Carbon	10K ohms 1/16W
R148	YF2116473GT	Carbon	47K ohms 1/16W	R196	YF2116562JT	Carbon	5.6K ohms 1/16W
R149	YF2116750JT	Carbon	75 ohms 1/16W	R197	YF2116223JT	Carbon	22K ohms 1/16W
R150	YF2116333GT	Carbon	33K ohms 1/16W	R198	YF2116272JT	Carbon	2.7K ohms 1/16W
R151	YF2116151JT	Carbon	150 ohms 1/16W	R199	YF2116104JT	Carbon	100K ohms 1/16W
R152	YF2116153JT	Carbon	15K ohms 1/16W	R200,201	YF2116562JT	Carbon	5.6K ohms 1/16W
R153	YF2116331JT	Carbon	330 ohms 1/16W	R202	YF2116102GT	Carbon	1K ohms 1/16W
R154	YF2116272JT	Carbon	2.7K ohms 1/16W	R203	YF2116104JT	Carbon	100K ohms 1/16W
R155	YF2116102GT	Carbon	1K ohms 1/16W	R204	YF2116222GT	Carbon	2.2K ohms 1/16W
R156	YF2116332JT	Carbon	3.3K ohms 1/16W	R205	YF2116821GT	Carbon	820 ohms 1/16W
R157	YF2116103JT	Carbon	10K ohms 1/16W	R206	YF2116511JT	Carbon	510 ohms 1/16W
R158	YF2116223JT	Carbon	22K ohms 1/16W	R207	YF2116561JT	Carbon	560 ohms 1/16W
R159	YF2116472JT	Carbon	4.7K ohms 1/16W	R208	YF2116102GT	Carbon	1K ohms 1/16W
R160	YF2116101JT	Carbon	100 ohms 1/16W	R209	YF2116750JT	Carbon	75 ohms 1/16W
R161	YF2116123JT	Carbon	12K ohms 1/16W	R210	YF2116333GT	Carbon	33K ohms 1/16W
R162	YF2116103JT	Carbon	10K ohms 1/16W	R211	YF2116153JT	Carbon	15K ohms 1/16W
R163,165	YF2116102GT	Carbon	1K ohms 1/16W	R212	YF2116151JT	Carbon	150 ohms 1/16W
R164	YF2116104JT	Carbon	100K ohms 1/16W	R213	YF2116331JT	Carbon	330 ohms 1/16W
R165	YF2116102JT	Carbon	1K ohms 1/16W	R214	YF2116272JT	Carbon	2.7K ohms 1/16W
R166	YF2116751JT	Carbon	750 ohms 1/16W for NTSC	R215	YF2116102GT	Carbon	1K ohms 1/16W
	YF2116821JT	Carbon	820 ohms 1/16W for PAL	R216	YF2116332JT	Carbon	3.3K ohms 1/16W
R167	YF2116102GT	Carbon	1K ohms 1/16W	R217	YF2116103JT	Carbon	10K ohms 1/16W
R168	YF21160R00T	Carbon	0 ohms for NTSC	R218	YF2116223JT	Carbon	22K ohms 1/16W
	YF2116222JT	Carbon	2.2K ohms 1/16W for PAL	R219	YF2116472JT	Carbon	4.7K ohms 1/16W
R169	YF2116332JT	Carbon	3.3K ohms 1/16W	R220	YF2116470JT	Carbon	47 ohms 1/16W
R170	YF2116103JT	Carbon	10K ohms 1/16W	R221	YF2116181JT	Carbon	180 ohms 1/16W
R171	YF2116183JT	Carbon	18K ohms 1/16W	R222	YF2116103JT	Carbon	10K ohms 1/16W
R172	YF2116822JT	Carbon	8.2K ohms 1/16W	R223	YF2116223JT	Carbon	22K ohms 1/16W
R173	YF2116182JT	Carbon	1.8K ohms 1/16W	R224	YF2116104JT	Carbon	100K ohms 1/16W
R174	YF2116271JT	Carbon	270 ohms 1/16W	R225	LP161KGT57	Carbon	1K ohms 1/16W
R175	YF2116330JT	Carbon	33 ohms 1/16W	R226	YF2116102GT	Carbon	1K ohms 1/16WR
R176-178	YF2116102GT	Carbon	1K ohms 1/16W	R230	YF2116102GT	Carbon	1K ohms 1/16W
R179	YF2116330JT	Carbon	33 ohms 1/16W for PAL	R231	YF2116103JT	Carbon	10K ohms 1/16W
R180	YF2116102GT	Carbon	1K ohms 1/16W	R232	YF2116222GT	Carbon	2.2K ohms 1/16W for NTSC
R181-183	YF2116102GT	Carbon	1K ohms 1/16W for PAL		YF21160R00	Jumper Resistor for PAL	
R184	YF2116330JT	Carbon	33 ohms 1/16W for PAL	R233	YF2116223GT	Carbon	22K ohms 1/16W
R185	YF2116821GT	Carbon	820 ohms 1/16W	R234	YF2116181JT	Carbon	180 ohms 1/16W
for PAL				R237	YF2116124JT	Carbon	120K ohms 1/16W for PAL
R186	YF2116102GT	Carbon	1K ohms 1/16W for PAL	R238	YF2116243JT	Carbon	24K ohms 1/16W for PAL
R187	YF2116332JT	Carbon	3.3K ohms 1/16W for PAL	VR1	YF6M2L10KB	Variable Resistor	10K ohms
R188	YF2116103JT	Carbon	10K ohms 1/16W	VR2	YF6M2L1KB	Variable Resistor	1K ohms
R189	YF2116392JT	Carbon	3.9K ohms 1/16W	VR101	EVM13SW00B14	Variable Resistor	10K ohms
R190	YF2116392JT	Carbon	3.9K ohms 1/16W for NTSC	VR102	EVM13SW00BE2	Variable Resistor	20 ohms
	YF2116562JT	Carbon	5.6K ohms 1/16W for PAL	VR103	EVM13SW00BQ2	Variable Resistor	40 ohms for PAL

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
VR104	EVM13SW00BC3	Variable Resistor 1.5K ohms	C147	YF400680CHJT	Ceramic 68 pF CH
VR105	EVM13SW00BE3	Variable Resistor 2.2K ohms	C148	ECEA0JKS470	Electrolytic 47 μ F 6.3V
VR106,107	EVM13SW00B14	Variable Resistor 10K ohms	C149	ECEA1AKS470	Electrolytic 47 μ F 10V
VR108	EVM13SW00BY2	Variable Resistor 330 ohms	C150	YF400511CHJT	Ceramic 510 pF
VR109	EVM13SW00BC3	Variable Resistor 1.5K ohms	C160	ECEA1AKS470	Electrolytic 47 μ F 10V
VR111	EVM13SW00BE2	Variable Resistor 220 ohms	C162	YF400104FZT	Ceramic 0.1 μ F
C1	ECEA0JKS470	Electrolytic 47 μ F 6.3V	C163	ECEA1AKS470	Electrolytic 47 μ F 10V for PAL
C2	YF400390CHJT	Ceramic 39 pF	CT1	ECRHA020D11	Trimmer Capacitor 20 PH
C3	YF426224FZS	Ceramic 0.22 μ F 50V	CT2	ECRHA020D11	Trimmer Capacitor 20 PH for PAL
C4	YF400101CHJT	Ceramic 100 pF	L1,2	NL32T8R2K	Coil 8.2 μ H
C5	YF400680CHJT	Ceramic 68 pF	L101-103	NL32T8R2K	Coil 8.2 μ H
C6	YF400101CHJT	Ceramic 100 pF	SW1,2	YFSSS212YK	Slide Switch
C7,8	YF400103FZT	Ceramic 0.01 μ F	CF1	YFSTR4043	Filter for NTSC
C21	ECEA1AKS470	Electrolytic 47 μ F 10V		YFSTR4044	Filter for PAL
C23	ECEA0JKS470	Electrolytic 47 μ F 6.3V	CF4	YFT45P3R58	Filter for NTSC
C24,25	ECEA1CKS100	Electrolytic 10 μ F 16V		YFT45P4R43	Filter for PAL
C26	ECEA1AKS470	Electrolytic 47 μ F 10V	CF101,102	YFSTR4045	Filter for NTSC
C27	ECEA0JKS101	Electrolytic 100 μ F 6.3V		YFSTR4046	Filter for PAL
C28	ECEA1AKS470	Electrolytic 47 μ F 10V	F1	YFSP510NM0	Current Fuse 1A
C30	ECEA0JKS470	Electrolytic 47 μ F 6.3V	J1,10,11	YF21160R00T	Jumper Resistor
C101	YF400121CHJT	Ceramic 120 pF	J13,14	YF21160R00T	Jumper Resistor
C102,103	YF400270CHJT	Ceramic 27 pF	CN1-JM	EMCS0650Z	6 pin Jack Male
C104	ECEA0JKS470	Electrolytic 47 μ F 6.3V	CN2-JM	EMCS0950Z	9 pin Jack Male
C105	ECEA1AKS470	Electrolytic 47 μ F 10V	CN3-JM	EMCS0350Z	5 pin Jack Male
C106	YF400270CHJT	Ceramic 27 pF	CN4-JM	EMCS0650Z	6 pin Jack Male
C107,108	ECEA1CKS100	Electrolytic 10 μ F 16V	CN5-JM	EMCS0350Z	3 pin Jack Male
C109,110	YF400103XKT	Ceramic 0.01 μ F	CN6-8-JM	EMCS0250Z	2 pin Jack Male
C111-114	ECEA1AKS470	Electrolytic 47 μ F 10V	CN9,10-JF	YFFPC11SS1T1	11 pin Jack Female
C115	ECEA1CKS100	Electrolytic 10 μ F 16V	CN11,12-JM	YFS7PS2T2EF	7 pin Jack Male
C116	ECEA1AKS470	Electrolytic 47 μ F 10V	MAIN BOARD		
C117,118	ECEA1CKS100	Electrolytic 10 μ F 16V			
C119	YF400680CHJT	Ceramic 68 pF	PCB1-2	o YFVKCAD37P1A	Printed Circuit Board Assy for NTSC
C120	YF400103XKT	Ceramic 0.01 μ F	IC1	o YFVKCAD37E1A	Printed Circuit Board Assy for PAL
C121	YF400560CHJT	Ceramic 56 pF	IC2	YFNJM1496M	IC
C122	YF400150CHJT	Ceramic 15 pF for NTSC	Q10,11	MN74HC221S	IC
C123	YF400103XKT	Ceramic 0.01 μ F	Q12	2SA1022-CD	Transistor
C124-126	YF400104FZT	Ceramic 0.1 μ F	Q13	2SD601-QR	Transistor
C127	YF400220CHJT	Ceramic 22 pF for NTSC	Q14-17	2SC2404-CD	Transistor
C128	YF400050CHDT	Ceramic 5 pF for PAL	Q23	2SC2404-CD	Transistor
C129	YF400104FZT	Ceramic 0.1 μ F for PAL	R22	YF2116272JT	Carbon 2.7K ohms 1/16W
C130	YF400104FZT	Ceramic 0.1 μ F	R23	YF2116123JT	Carbon 12K ohms 1/16W
C131	ECEA0JKS470	Electrolytic 47 μ F 6.3V	R24	YF2116102GT	Carbon 1K ohms 1/16W
C132	ECEA1HKS2R2	Electrolytic 2.2 μ F 50V	R25	YF2116112JT	Carbon 1.1K ohms 1/16W
C133,134	ECEA1CKS100	Electrolytic 10 μ F 16V	R26	YF2116102GT	Carbon 1K ohms 1/16W
C135	YF400030CHDT	Ceramic 3 pF	R27	YF2116222GT	Carbon 2.2K ohms 1/16W
C136	ECEA1HKS2R2	Electrolytic 2.2 μ F 50V	R28	YF2116333GT	Carbon 33K ohms 1/16W
C137	YF400104FZT	Ceramic 0.1 μ F	R29,30	YF2116243GT	Carbon 24K ohms 1/16W
C138-140	YF400103XKT	Ceramic 0.01 μ F	R31	YF2116682JT	Carbon 6.8K ohms 1/16W
C141	ECEA1AKS470	Electrolytic 47 μ F 10V	R32	YF2116332GT	Carbon 3.3K ohms 1/16W
C142	YF400103XKT	Ceramic 0.01 μ F	R35,36	YF2116202JT	Carbon 2K ohms 1/16W
C143	ECEA1CKS100	Electrolytic 10 μ F 16V			
C144	YF400511CHJT	Ceramic 510pF			
C145,146	ECEA1CKS100	Electrolytic 10 μ F 16V			

SYMBOL NO.	PART NO.	DESCRIPTION		SYMBOL NO.	PART NO.	DESCRIPTION
R37 R38 R39,40 R41 R42	YF2116272JT YF2116152JT YF2116331JT YF2116821GT YF2116432JT	Carbon Carbon Carbon Carbon Carbon	2.7K ohms 1/16W 1.5K ohms 1/16W 330 ohms 1/16W 820 ohms 1/16W 4.3K ohms 1/16W	32 PIN CONNECTOR BOARD		
R43 R44 R45 R46 R47	YF2116272JT YF2116162JT YF2116221JT YF2116103JT YF2116332JT	Carbon Carbon Carbon Carbon Carbon	2.7K ohms 1/16W 1.6K ohms 1/16W 220 ohms 1/16W 10K ohms 1/16W 3.3K ohms 1/16W	PCB3 CN1	o YFVKZAD37P2A YFA348949324	Printed Circuit Board Assy 32 pin Connector
R48 R49 R50 R51 R52	YF2116102GT YF2116103JT YF2116152JT ER0S2CKF5601 YF2116222GT	Carbon Carbon Carbon Metal Carbon	1K ohms 1/16W 10K ohms 1/16W 1.5K ohms 1/16W 5.6K ohms 1/8W 2.2K ohms 1/16W	ACCESSORY PARTS/PACKAGING PARTS		
R92 R93 R94,95 R96 R227	YF2116103JT YF2116104JT YF2116102GT LP161KGT57 ERD10TJ821	Carbon Carbon Carbon Carbon Carbon	10K ohms 1/16W 100K ohms 1/16W 1K ohms 1/16W 1K ohms 820 ohms 1/8W	M32 M33 M34 M35 M36 M40	o YFV8QA1087BN o YFV8QA1088AN o YFV8QA1089AN VQA0120-3 YWV22XPRB99K YFV8SA0009CN YWT20X25C03 o YFV9CA0886AN o YFV9CB0886AN o YFV9CC0886AN	Operating Instruction for NTSC Operating Instruction for WV-AD37E Operating Instruction for WV-AD37N Warranty Card for NTSC Service Center List for NTSC Safety Guide for NTSC Polyethylene Bag Packaging for NTSC Packaging for WV-AD37E Packaging for WV-AD37N
R235 R236 R237	ERD10TJ101 ERD10TJ103 ERD10TJ124	Carbon Carbon Carbon	100 ohms 1/8W 10K ohms 1/8W 120K ohms 1/16W	CAMERA REMOTE CONTROLLER WV-CR12		
C9 C10 C11 C12	YF400103FZT YF400330CHJT YF400270CHJT ECEA0JKS470 ECEA1CKS100	Ceramic Ceramic Ceramic Electrolytic Electrolytic	0.01 µF 33 pF for NTSC 27 pF for PAL 47 µF 6.3V 10 µF 16V	MISCELLANEOUS		
C13-15 C16 C17 C18 C19	YF400103FZT YF400104FZT ECEA0JKS470 YF400103FZT ECEA0JKS470	Ceramic Ceramic Electrolytic Ceramic Electrolytic	0.01 µF 0.1 µF 47 µF 6.3V 0.01 µF 47 µF 6.3V	IC101 CN1 CN2 CN3 CN4	AN6541 YGRM15TRD10S BNC-BRZ-1S YF01P0420-00 YFD0-121N-601	IC 10 pin Camera Connector BNC Monitor Out Connector Audio Out Jack EVF Connector
C20 C29 C31 C32,35 C162	YF400180UJTT YF400120CHJT ECEA0JKS470 YF400101CHJT YF400104FZT ECCF1H121JC	Ceramic Ceramic Electrolytic Ceramic Ceramic Ceramic	18 pF for NTSC 12 pF for PAL 47 µF 6.3V 100 pF 0.1 µF 120 pF for PAL	CN5 M1 M2 M3	o EMCTMA07C07V o YFV5WA0291B3 o YFV5WA0292A4 o YFV5EA0380B2	10 pin VTR Connector Rear Panel Bottom Blank Panel Upper Cover
CF2 CF3	YFSTR4045 YFSTR4046 YFSTR4043 YFSTR4044	Filter for NTSC Filter for PAL Filter for NTSC Filter for PAL		M4 M5 M6 M7 M8	o YFV5EA0381B3 o YFV2KA0149B2 YFV5RA0035A4 YFV5RA0043A4 YFV5RA0072A4	Side Cover Main Chassis Knob A for Slided Switch Knob B for VR Knob C
LED BOARD				M9 M10 M11 M12 M13	o YFV6JA0040A4 o YFV2CA0118A4 o YFV2SA0256A4 o YFV2SA0257B3 YFSJ-5007	Button Hold Plate Mounting Angle Mounting Angle Rubber Foot
PCB2 D1 D2 R240 VR101	o YFVKZAD37P1A LN28RP LN48YP ERD10TJ181 YFK111A-1KB	Printed Circuit Board Assy Power Indicator Gen-Lock Indicator Carbon Variable Resistor	 180 ohms 1/8W 1K ohms	M14 M15 M16 M17 M18	o YFV2JA0011A4 o YFV2FA0130A4 o YFV4JA0133A4 o YFV4JA0135A4 YFV7MA0099A4	Bracing Strut Cushion Spring Spring Safety Label
SW1	YFSSS312L2N	Slide Switch		M19 M20 M21	YFV7MA0103A4 YFV7MA0107A4 YFV7MA0113A4	Shock Label for NTSC FCC Safety Label for NTSC Safety Label

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
M22	△ △ △ o YFV7QA1086A4 o YFV7QA1087A4 o YFV7QA1088A4	Main Label for NTSC Main Label for WV-CR12E Main Label for WV-CR12N	D9	MA153	Diode
M23	YFV1EA0063A4	Special Screw	D10	MA151K	Diode
M24	YFV5MA0022A4	Shoe	D11	MA153	Diode
M25	o YFCF51703A	Knob Base	D12	MA151K	Diode
M26	o YFCF59609A	Knob Cap	R1	YF2116750JT	Carbon 75 ohms 1/16W
M27-1	o YFV2PA0182A4	Knob Label B	R2	YF2116221JT	Carbon 220 ohms 1/16W
M27-2	o YFV2PB0182A4	Knob Label R	R12	YF2116123JT	Carbon 12K ohms 1/16W
			R13	YF2116203JT	Carbon 20K ohms 1/16W
CR MAIN BOARD			R14	YF2116222GT	Carbon 2.2K ohms 1/16W
PCB1	o YFVKYCR12P1A	Printed Circuit Board Assy	R15	YF2116103JT	Carbon 10K ohms 1/16W
IC1	MN4053BS	IC	R16	YF2116821GT	Carbon 820 ohms 1/16W
IC2	MN1551CVT3S	IC	R17	YF2116681JT	Carbon 680 ohms 1/16W
IC3	M5234FP	IC	R18	YF2116220JT	Carbon 22 ohms 1/16W
IC4	MN1280T	IC	R19	YF2116392JT	Carbon 3.9K ohms 1/16W
IC5	NJM3414M	IC	R20	YF2116332JT	Carbon 3.3K ohms 1/16W
IC6	MN1754CVS2	IC	R21	YF2116182JT	Carbon 1.8K ohms 1/16W
Q4	2SD601-QR	Transistor	R22	YF2116560JT	Carbon 56 ohms 1/16W
Q5	2SA1022-C	Transistor	R23	YF2116392JT	Carbon 3.9K ohms 1/16W
Q6	2SC2404-CD	Transistor	R24	YF2116122JT	Carbon 1.2K ohms 1/16W
Q7-13	2SA1022-C	Transistor	R25	YF2116560JT	Carbon 56 ohms 1/16W
Q14,15	2SC2404-CD	Transistor	R26	YF2116562JT	Carbon 5.6K ohms 1/16W
Q16-18	2SD601-QR	Transistor	R27	YF2116333GT	Carbon 33K ohms 1/16W
Q19	2SB709-Q	Transistor	R28	YF2116560JT	Carbon 56 ohms 1/16W
Q20,21	2SD601-QR	Transistor	R29	YF2116333GT	Carbon 33K ohms 1/16W
Q22	2SC2404-CD	Transistor	R30	YF2116560JT	Carbon 56 ohms 1/16W
Q23-26	2SD601-QR	Transistor	R31	YF2116202JT	Carbon 2K ohms 1/16W
Q27	2SA1022-C	Transistor	R32	YF2116333GT	Carbon 33K ohms 1/16W
Q28	2SC2404-CD	Transistor	R33	YF2116332JT	Carbon 3.3K ohms 1/16W
Q29-32	2SA1022-C	Transistor	R34	YF2116333GT	Carbon 33K ohms 1/16W
Q33,34	2SC2404-CD	Transistor	R35	YF2116622JT	Carbon 6.2K ohms 1/16W
Q35,36	2SD601-QR	Transistor	R36	YF2116153JT	Carbon 15K ohms 1/16W
Q37-39	2SA1022-C	Transistor	R37	YF2116273JT	Carbon 27K ohms 1/16W
Q40	2SC2404-CD	Transistor	R38	YF2116433JT	Carbon 43K ohms 1/16W
Q41	2SD601-QR	Transistor	R39,41	YF2116153JT	Carbon 15K ohms 1/16W
Q42	2SC2404-CD	Transistor	R42	YF2116153JT	Carbon 15K ohms 1/16W
Q43	2SD601-QR	Transistor	R43	YF2116560JT	Carbon 56 ohms 1/16W
Q44,45	2SC2404-CD	Transistor	R44	YF2116333GT	Carbon 33K ohms 1/16W
Q46	2SD601-QR	Transistor	R45	YF2116392JT	Carbon 3.9K ohms 1/16W
Q47-50	2SA1022-C	Transistor	R46	YF2116222GT	Carbon 2.2K ohms 1/16W
Q51-55	2SD601-QR	Transistor	R47	YF2116103JT	Carbon 10K ohms 1/16W
Q56	2SB709-Q	Transistor	R48	YF2116333GT	Carbon 33K ohms 1/16W
Q57-60	2SD601-QR	Transistor	R49	YF2116101JT	Carbon 100 ohms 1/16W
Q61	2SB709-Q	Transistor	R50	YF2116680JT	Carbon 68 ohms 1/16W
Q62-64	2SD601-QR	Transistor	R51	YF2116473GT	Carbon 47K ohms 1/16W
Q65	2SB709-Q	Transistor	R52	YF2116750JT	Carbon 75 ohms 1/16W
Q66	2SD601-QR	Transistor	R53	YF2116562JT	Carbon 5.6K ohms 1/16W
Q67	2SB709-Q	Transistor	R54-56	YF2116103JT	Carbon 10K ohms 1/16W
Q68	2SD601-QR	Transistor	R57	YF2116683JT	Carbon 68K ohms 1/16W
D1-3	MA151WA	Diode	R58	YF2116183JT	Carbon 18K ohms 1/16W
D4,5	MA151K	Diode	R59	YF2116273JT	Carbon 27K ohms 1/16W
D6	MA151WK	Diode	R60	YF2116563JT	Carbon 56K ohms 1/16W
D7,8	MA151K	Diode	R61	YF2116222GT	Carbon 2.2K ohms 1/16W
			R62	YF2116751JT	Carbon 750 ohms 1/16W
			R63,64	YF2116332JT	Carbon 3.3K ohms 1/16W

SYMBOL NO.	PART NO.	DESCRIPTION		SYMBOL NO.	PART NO.	DESCRIPTION	
R65	YF2116182JT	Carbon	1.8K ohms 1/16W	R131	YF2116392JT	Carbon	3.9K ohms 1/16W
R66	YF2116561JT	Carbon	560 ohms 1/16W	R132	YF2116203JT	Carbon	20K ohms 1/16W
R67,68	YF2116560JT	Carbon	56 ohms 1/16W	R133	YF2116103JT	Carbon	10K ohms 1/16W
R69	YF2116392JT	Carbon	3.9K ohms 1/16W	R134,135	YF2116272JT	Carbon	2.7K ohms 1/16W
R70	YF2116122JT	Carbon	1.2K ohms 1/16W	R136	YF2116331JT	Carbon	330 ohms 1/16W
R71	YF2116562JT	Carbon	5.6K ohms 1/16W	R137	YF2116392JT	Carbon	3.9K ohms 1/16W
R72	YF2116392JT	Carbon	3.9K ohms 1/16W	R138	YF2116103JT	Carbon	10K ohms 1/16W
R73	YF2116222GT	Carbon	2.2K ohms 1/16W	R139	YF2116272JT	Carbon	2.7K ohms 1/16W
R74	YF2116103JT	Carbon	10K ohms 1/16W	R140	YF2116223JT	Carbon	22K ohms 1/16W
R75	YF2116101JT	Carbon	100 ohms 1/16W	R141	YF2116103JT	Carbon	10K ohms 1/16W
R76	YF2116560JT	Carbon	56 ohms 1/16W	R142	YF2116243JT	Carbon	24K ohms 1/16W
R77,78	YF2116750JT	Carbon	75 ohms 1/16W	R143,144	YF2116103JT	Carbon	10K ohms 1/16W
R79-82	YF2116333GT	Carbon	33K ohms 1/16W	R145	YF2116104JT	Carbon	100K ohms 1/16W
R83	YF2116750JT	Carbon	75 ohms 1/16W	R146	YF2116221JT	Carbon	220 ohms 1/16W
R84,85	YF2116183JT	Carbon	18K ohms 1/16W	R147,148	YF2116222GT	Carbon	2.2K ohms 1/16W
R86,87	YF2116272JT	Carbon	2.7K ohms 1/16W	R149,150	YF2116203JT	Carbon	20K ohms 1/16W
R88	YF2116560JT	Carbon	56 ohms 1/16W	R151	YF2116560JT	Carbon	56 ohms 1/16W
R89	YF2116561JT	Carbon	560 ohms 1/16W	R152	YF2116332JT	Carbon	3.3K ohms 1/16W
R90	YF2116560JT	Carbon	56 ohms 1/16W	R153,154	YF2116102GT	Carbon	1K ohms 1/16W
R91	YF2116682JT	Carbon	6.8K ohms 1/16W	R155	YF2116222GT	Carbon	2.2K ohms 1/16W
R92	YF2116332JT	Carbon	3.3K ohms 1/16W	R156	YF2116152JT	Carbon	1.5K ohms 1/16W
R93	YF2116182JT	Carbon	1.8K ohms 1/16W	R157,158	YF2116511JT	Carbon	510 ohms 1/16W
R94	YF2116560JT	Carbon	56 ohms 1/16W	R159	YF2116222GT	Carbon	2.2K ohms 1/16W
R95	YF2116392JT	Carbon	3.9K ohms 1/16W	R160	YF2116302JT	Carbon	3K ohms 1/16W
R96	YF2116122JT	Carbon	1.2K ohms 1/16W	R161	YF2116103JT	Carbon	10K ohms 1/16W
R97	YF2116560JT	Carbon	56 ohms 1/16W	R162	YF2116750JT	Carbon	75 ohms 1/16W
R98	YF2116333GT	Carbon	33K ohms 1/16W	R163	YF2116101JT	Carbon	100 ohms 1/16W
R99	YF2116560JT	Carbon	56 ohms 1/16W	R164	YF2116331JT	Carbon	330 ohms 1/16W
R100	YF2116333GT	Carbon	33K ohms 1/16W	R165	YF2116101JT	Carbon	100 ohms 1/16W
R101	YF2116560JT	Carbon	56 ohms 1/16W	R166	YF2116562JT	Carbon	5.6K ohms 1/16W
R102	YF2116333GT	Carbon	33K ohms 1/16W	R167	YF2116332JT	Carbon	3.3K ohms 1/16W
R103	YF2116622JT	Carbon	6.2K ohms 1/16W	R168	YF2116223JT	Carbon	22K ohms 1/16W
R104	YF2116273JT	Carbon	27K ohms 1/16W	R169	YF2116750JT	Carbon	75 ohms 1/16W
R105	YF2116153JT	Carbon	15K ohms 1/16W	R170	YF2116101JT	Carbon	100 ohms 1/16W
R106	YF2116560JT	Carbon	56 ohms 1/16W	R171	YF2116331JT	Carbon	330 ohms 1/16W
R107	YF2116473GT	Carbon	47K ohms 1/16W	R172	YF2116101JT	Carbon	100 ohms 1/16W
R108	YF2116333GT	Carbon	33K ohms 1/16W	R173	YF2116562JT	Carbon	5.6K ohms 1/16W
R109	YF2116392JT	Carbon	3.9K ohms 1/16W	R174	YF2116332JT	Carbon	3.3K ohms 1/16W
R110	YF2116101JT	Carbon	100 ohms 1/16W	R175	YF2116223JT	Carbon	22K ohms 1/16W
R111	YF2116102GT	Carbon	1K ohms 1/16W	R176-178	YF2116473GT	Carbon	47K ohms 1/16W
R113	YF2116750JT	Carbon	75 ohms 1/16W	R179,180	YF2116103JT	Carbon	10K ohms 1/16W
R114	YF2116273JT	Carbon	27K ohms 1/16W	R181-184	YF2116473GT	Carbon	47K ohms 1/16W
R115	YF2116103JT	Carbon	10K ohms 1/16W	R185	YF2116101JT	Carbon	100 ohms 1/16W
R116	YF2116152JT	Carbon	1.5K ohms 1/16W	R186	YF2116472JT	Carbon	4.7K ohms 1/16W
R117	YF2116560JT	Carbon	56 ohms 1/16W	R187,188	YF2116392JT	Carbon	3.9K ohms 1/16W
R118	YF2116681JT	Carbon	680 ohms 1/16W	R189	YF2116512JT	Carbon	5.1K ohms 1/16W
R119	YF2116151JT	Carbon	150 ohms 1/16W	R190	YF2116473GT	Carbon	47K ohms 1/16W
R120	YF2116471JT	Carbon	470 ohms 1/16W	R191	YF2116242GT	Carbon	2.4K ohms 1/16W
R121	YF2116561JT	Carbon	560 ohms 1/16W	R192	YF2116683GT	Carbon	68K ohms 1/16W
R122-125	YF2116332JT	Carbon	3.3K ohms 1/16W	R193	YF2116333GT	Carbon	33K ohms 1/16W
R126	YF2116182JT	Carbon	1.8K ohms 1/16W	R194	YF2116303GT	Carbon	30K ohms 1/16W
R127	YF2116560JT	Carbon	56 ohms 1/16W	R195-197	YF2116103JT	Carbon	10K ohms 1/16W
R128	YF2116392JT	Carbon	3.9K ohms 1/16W	R198-200	YF2116473GT	Carbon	47K ohms 1/16W
R129	YF2116122JT	Carbon	1.2K ohms 1/16W	R201	YF2116103JT	Carbon	10K ohms 1/16W
R130	YF2116682JT	Carbon	6.8K ohms 1/16W	R202	YF2116303JT	Carbon	30K ohms 1/16W

SYMBOL NO.	PART NO.	DESCRIPTION		SYMBOL NO.	PART NO.	DESCRIPTION	
R203	YF2116103JT	Carbon	10K ohms 1/16W	C36	YF400101CHJT	Ceramic	100 pF
R204	YF21158R2JT	Carbon	8.2 ohms 1/16W	C37	YF400681XKT	Ceramic	680µF 50V
R205,206	YF2116103JT	Carbon	10K ohms 1/16W	C38	YF400471CHJT	Ceramic	470 pF
R207	YF2116222GT	Carbon	2.2K ohms 1/16W	C39	YF400271CHJT	Ceramic	270 pF
R208	YF2116103JT	Carbon	10K ohms 1/16W	C40	ECEA1CKS100	Electrolytic	10 µF 16V
R209	YF2116153JT	Carbon	15K ohms 1/16W	C41	ECEA0JKS101	Electrolytic	100µF 6.3V
R210	YF2116363JT	Carbon	36K ohms 1/16W	C42	ECEA1CKS100	Electrolytic	10 µF 16V
R211	YF2116222GT	Carbon	2.2K ohms 1/16W	C43	YF400151CHJT	Ceramic	150 pF
R212,213	YF2116223JT	Carbon	22K ohms 1/16W	C44	ECEA1AKK100	Electrolytic	10 µF 10V
R214	YF2116103JT	Carbon	10K ohms 1/16W	C46	ECEA1AKS470	Electrolytic	47 µF 10V
R215	YF2116473GT	Carbon	47K ohms 1/16W	C47	ECEA1ASS101	Electrolytic	100µF 10V
R216	YF2116103JT	Carbon	10K ohms 1/16W	C48,49	ECEA1AKS470	Electrolytic	47 µF 10V
R217	YF2116682JT	Carbon	6.8K ohms 1/16W	C50	ECSF1AE476	Tantalum	47 µF 10V
R218	YF2116470JT	Carbon	47 ohms 1/16W	C51	ECEA1AKS470	Electrolytic	47 µF 10V
R219	YF2116152JT	Carbon	1.5K ohms 1/16W	C52	ECEA1AFS470	Electrolytic	47 µF 10V
R220	YF2116182JT	Carbon	1.8K ohms 1/16W	C53	ECEA1AFS221	Electrolytic	220 µF 10V
R221	YF2116222GT	Carbon	2.2K ohms 1/16W	C54,55	ECEA1AKS470	Electrolytic	47 µF 10V
R222,223	YF2116333GT	Carbon	33K ohms 1/16W	C56	YF400121CHJT	Ceramic	120 pF
R224	YF2116103JT	Carbon	10K ohms 1/16W	C57	YF400390CHJT	Ceramic	39 pF
R225,226	YF2116223JT	Carbon	22K ohms 1/16W	C58	ECSF1AE476	Tantalum	47 µF 10V
R227	YF2116683JT	Carbon	68K ohms 1/16W	C59	ECEA1AKS470	Electrolytic	47 µF 10V
R228	YF2116473GT	Carbon	47K ohms 1/16W	C60	ECEA1HKS010	Electrolytic	1 µF 50V
R229	YF2116222GT	Carbon	2.2K ohms 1/16W	C61	YF426224FZS	Ceramic	0.22 µF 50V
R300	YF2116104JT	Carbon	100K ohms 1/16W	C62	ECQV1H474JZ	Plastic	0.47 µF 50V
VR1	YFH0521A1K	Variable Resistor	1K ohms	C63	YF400104FZT	Ceramic	0.1 µF
Z1	YFRKM8LFW154	Block Resistor		C70	ECEA0JKK100	Electrolytic	10 µF 6.3V
C4	ECEA0JKS470	Electrolytic	47 µF 6.3V	CT1	ECRHA040E11	Trimmer Capacitor	40 pF
C5	ECEA0JKS101	Electrolytic	100µF 6.3V	L1-3	EL05S18R2K	Coil	8.2µH
C6	YF400390CHJT	Ceramic	39 pF	L4	EL05S101K	Coil	100 µH
C7,8	YF400820CHJT	Ceramic	82 pF	L5	EL05S18R2K	Coil	8.2µH
C9	YF400680CHJT	Ceramic	68 pF	SW1	YFSSS222A	Slide Switch	
C10	YF400560CHJT	Ceramic	56 pF	X1	YFEF0-FC4004	Oscillator	
C11	YF400270CHJT	Ceramic	27 pF	X2	YFKF38G	Crystal Oscillator	
C12	YF400390CHJT	Ceramic	39 pF	X3	EF0-FC8004	Crystal Oscillator	
C13	YF400820CHJT	Ceramic	82 pF	F1,2	YFSP510NM0	Current Fuse	1A
C14	YF400150CHJT	Ceramic	15 pF	J1	YF21160R00T	Jumper Resistor	
C15	ECEA1AKS470	Electrolytic	47 µF 10V	CN1-JM	EMCS0550Z	5 pin Jack Male	
C16	ECEA1CKS100	Electrolytic	10 µF 16V	CN2-JM	EMCS0250Z	2 pin Jack Male	
C17	ECEA0JU102	Electrolytic	1000 µF 6.3V	CN3-JM	EMCS0850Z	8 pin Jack Male	
C18	ECEA1HKS010	Electrolytic	1 µF 50V	CN4-JM	EMCS1150Z	11 pin Jack Male	
C19	ECEA1AKS470	Electrolytic	47 µF 10V	CN5-JM	EMCS1050Z	10 pin Jack Male	
C20	ECEA0JKS101	Electrolytic	100µF 6.3V	CN6-JM	EMCS0350Z	3 pin Jack Male	
C21	ECEA1CKS100	Electrolytic	10 µF 16V	CN7-JM	EMCS0750Z	7 pin Jack Male	
C22,23	ECEA1AKS470	Electrolytic	47 µF 10V	CN8-JM	EMCS0250Z	2 pin Jack Male	
C24	ECEA0JU102	Electrolytic	1000 µF 6.3V	CN9-JM	EMCS1050Z	10 pin Jack Male	
C25	ECEA1AKS470	Electrolytic	47 µF 10V	SWITCH BOARD			
C26	ECEA0JKS101	Electrolytic	100µF 6.3V				
C27	YF400560CHJT	Ceramic	56 pF	PCB2	oYFVKZCR12P2A	Printed Circuit Board	
C28	YF400820CHJT	Ceramic	82 pF	SW1	YFSBU1024L10	Rotary Switch	
C29	YF400151CHJT	Ceramic	150 pF				
C30	YF400121CHJT	Ceramic	120 pF				
C31	YF400560CHJT	Ceramic	56 pF				
C32	YF400330CHJT	Ceramic	33 pF				
C33-35	ECEA1AKS470	Electrolytic	47 µF 10V				

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
CONTROL BOARD			PAN/TILT HEAD WV-PH10		
			MISCELLANEOUS		
PCB3 D1-23 D24 R1 R2 VR1-3 C1-10 SW1-8 SW9,10 SW11-14 SW15-22 SW23	o YFVKZCR12P3A MA165 LN29RD ERD10TJ302 ERD10TJ221 YFK111A-10KB ECQM1H393KZ KEF10905 YFKEG10905 KEG10902 YFSSS312L4 YFSSS323L2	Printed Circuit Board Assy Diode LED Carbon 3K ohms 1/8W Carbon 220 ohms 1/8W Variable Resistor 10K ohms Plastic 0.039 μ F 50V Push Switch Push Switch Push Switch Slide Switch Slide Switch	D101 C101,102 MO1 MO2 SW3,4 SW5 CN1 CN2 CN10 M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 M12 M15 M16 M17 M18 M19 M22 M24 M25 M26 M27 M28 M29 M30 M31 M32 M33 M34 M35 M36 M37 M40 M41 M42 M43 M44 M45	10D1 ECKF1H104KB o YF140B-020 o YF140C-240 o YFD2MS o YFJ-55088 o YF140C-273 o YFHEC-0738 o YF140C-275 o YF140C-142 o YF140C-140U o YF140C-141 o YF140B-021 o YF140C-229U o YF140B-022 o YF140C-228U o YF140C-227U o YF140C-231U o YF140C-230 o YF140C-233 o YF140C-234 o YF140B-017 o YF140C-248 o YF140C-235 o YF140C-232 o YF140C-264 o YFV7QA1094A4 o YFV7QA1095A4 o YFV7QA1096A4 o YF140C-190A o YF140C-191E o YF140C-191D o YF140C-192B o YF140C-192A o YF140C-106 o YF140C-107 o YF506C-001AU o YF140C-197AU o YF140C-105U o YF140C-198 o YF134C-009A o YF128C-010 o YF128C-005 o YF140C-206 o YF140C-202 o YF140C-208AU o YF140C-218 o YFV7SA0318B4 o YF140C-200 o YF140C-193A	Diode Ceramic 0.1 μ F 50V Tilt Motor Unit Pan Motor Unit Micro Switch Slided Switch Connector Cable Assy DC Jack DC Jack Cable Assy Main Base Side Plate Pan Main Shaft Base Assy Pan Support Base Assy Pan Motor Gear Pan Strip Plate Assy Bearing A Bearing B Spring Liner T Cam Flange(X2) Stopper Out Gear Unit Ball Bearing Pan Motor Base Housing Mounting Plate for DC Jack Main Label for NTSC Main Label for WV-PH10E Main Label for WV-PH10N Cover Side Cover A for NTSC,WV-PH10E Side Cover A for WV-PH10N Side Cover B for NTSC,WV-PH10E Side Cover B for WV-PH10N Camera Stand Camera Stand Rubber Camera Mounting Screws Insulator Paper Decoration Plate Cushion Rubber Shoe Spring Plate for Shoe Stopper Screw for Shoe Cord Bushing A Battery Holder Snap Insulator Plate for Battery Mounting Bracket for Battery Cover Battery Box Seal Stopper Screw Battery Holder Cover A
CR SUB BOARD					
PCB4 IC1 Q1,2 D1-3 D4 R1 R2 R3 R4 R5 R6 R7 R8 C1 C2 C3	o YFVKYCR12P4A YFMN4538BS 2SD601-QR MA151K MA165 YF2116203JT YF2116103JT YF2116683JT YF2116333GT YF2116223JT YF2116102GT YF2116222GT YF2116333GT ECEA1HKS010 ECEA1CKS100 ECEA1VKS3R3	Printed Circuit Board Assy IC Transistor Diode Diode Carbon 20K ohms 1/16W Carbon 10K ohms 1/16W Carbon 68K ohms 1/16W Carbon 33K ohms 1/16W Carbon 22K ohms 1/16W Carbon 1K ohms 1/16W Carbon 2.2K ohms 1/16W Carbon 33K ohms 1/16W Electrolytic 1 μ F 50V Electrolytic 10 μ F 16V Electrolytic 3.3 μ F 35V			
ACCESSORY PARTS/PACKAGING PARTS					
CN10 M31 M32 M33 M34 M35 M36 M37 M40	o YFEO-111J-601 o YFV8QA1051AN o YFV8QA1052AN o YFV8QA1053AN VQA0120-3 YWV22XPRB99K YFV8SA0009CN XZB26X40C05 YWT050803 YWT10X35C03 o YFV9CA0854AN o YFV9CB0854AN o YFV9CC0854AN	Control Cable Operating Instruction for NTSC Operating Instruction for WV-CR12E Operating Instruction for WV-CR12N Warranty Card Service Center List Safety Card Bag Bag Bag Packaging for NTSC Packaging for WV-CR12E Packaging for WV-CR12N			

SYMBOL NO.	PART NO.	DESCRIPTION
M46	o YF140C-194A	Battery Holder Cover B
M47	o YF140C-290	Cord Bushing B
M48	o YF128C-003B	Mounting Base
M49	o YF140C-201	Battery Holder

CONTROL BOARD

PCB1	o YF140C-018U	Printed Circuit Board Assy
IC1,2	o TA75339P	IC
IC3,4	o TA7354	IC
Q1,2	2SB1015 or 2SA490	Transistor
Q3,4	2SC1815	Transistor
D1-6	IS1588	Diode
D7	05Z3.6	Zenner Diode
D8	10D1	Diode
R1	ERD25FJ183	Carbon 18K ohms 1/4W
R2,3	ERD25FJ333	Carbon 33K ohms 1/4W
R4	ERD25FJ183	Carbon 18K ohms 1/4W
R5,6	ERD25FJ104	Carbon 100K ohms 1/4W
R7-14	ERD25FJ272	Carbon 2.7K ohms 1/4W
R15,16	ERD25FJ680	Carbon 68 ohms 1/4W
R17,18	ERD25FJ5R1	Carbon 5.1 ohms 1/4W
R19,20	ERD25FJ331	Carbon 330 ohms 1/4W
R21,22	ERD25FJ472	Carbon 4.7K ohms 1/4W
R23,24	ERD25FJ331	Carbon 330 ohms 1/4W
R25,26	ERD25FJ272	Carbon 2.7K ohms 1/4W
R27	ERD25FJ472	Carbon 4.7K ohms 1/4W
VR1,2	o YFSR19-2.2K	Variable Rasistor 2.2K ohms
C1-3	ECKF1H153KB	Ceramic 0.015 μ F 50V
C4	ECEA1CK470S	Electrolytic 47 μ F 16V
C5-8	ECKF1H223KB	Ceramic 0.022 μ F 50V
C9,10	ECKF1H223KB	Ceramic 0.022 μ F 50V
C11,12	ECEA1CK010S	Electrolytic 1 μ F 16V
C13	ECEA1CK101S	Electrolytic 100 μ F 16V
CN1-JM	o YF305815000	5 pin Jack Male
CN2-JM	o YF302815000	2 pin Jack Male
CN3-JM	o YF304815002	4 pin Jack Male
CN4-JM	o YF304815000	4 pin Jack male

SWITCH BOARD

PCB2	o YF140B-016AU	Printed Circuit Board Assy
SW1,2	o YFS-5GL13	Micro Switch

SYMBOL NO.	PART NO.	DESCRIPTION
------------	----------	-------------

ACCESSORY PARTS/PACKAGING PARTS

M61	o YFV8QA1058AN o YFV8QA1059AN o YFV8QA1060AN	Operating Instruction for NTSC Operating Instruction for WV-PH10E Operating Instruction for WV-PH10N
M62	VQA0120-3	Warranty Card for NTSC
M63	YWV22XPRB99K	Service Center List for NTSC
M64	YFV8SA0009CN	Safety Card for NTSC
M65	YWT15X25C03	Polyethylene Bag for Power Cord
M66	YWT23X30C03	Polyethylene Bag for Printed
M67	YWT23X34C03	Polyethylene Bag for Pan/Tilt Head
M69	o YFV9CA0861AN o YFV9CA0862AN o YFV9CA0872AN	Packaging for NTSC Packaging for WV-PH10E Packaging for WV-PH10N
M70	YWS-RB032	Packing Label

MOUNTING BRACKET WV-Q39

MISCELLANEOUS

CN101	o YFE0111J602	10 pin Connector Cable Assy
CN102	o YFDD8110N610	8 pin Connector
M1	o YFDVQ392201	Adaptor Base for Left Side
M2	o YFDVQ392202	Adaptor Base for Right Side
M3	o YFDVQ392403A	Reinforcement Plate
M4	o YFDVQ394401	Protection Sheet
M5	o YFDVQ393401	Stripper Screws
M6	o YFDVQ392404	Ander Plate for Adaptor
M7	YWV421-EM01U	Control Screws for Camera
M8	o YFDVQ392305	Junction Box
M9	YWSR-5P-4	Cord Bushing
M10	o YFV7QA1097A4 o YFV7QA1098A4	Main Label for NTSC Main Label for PAL

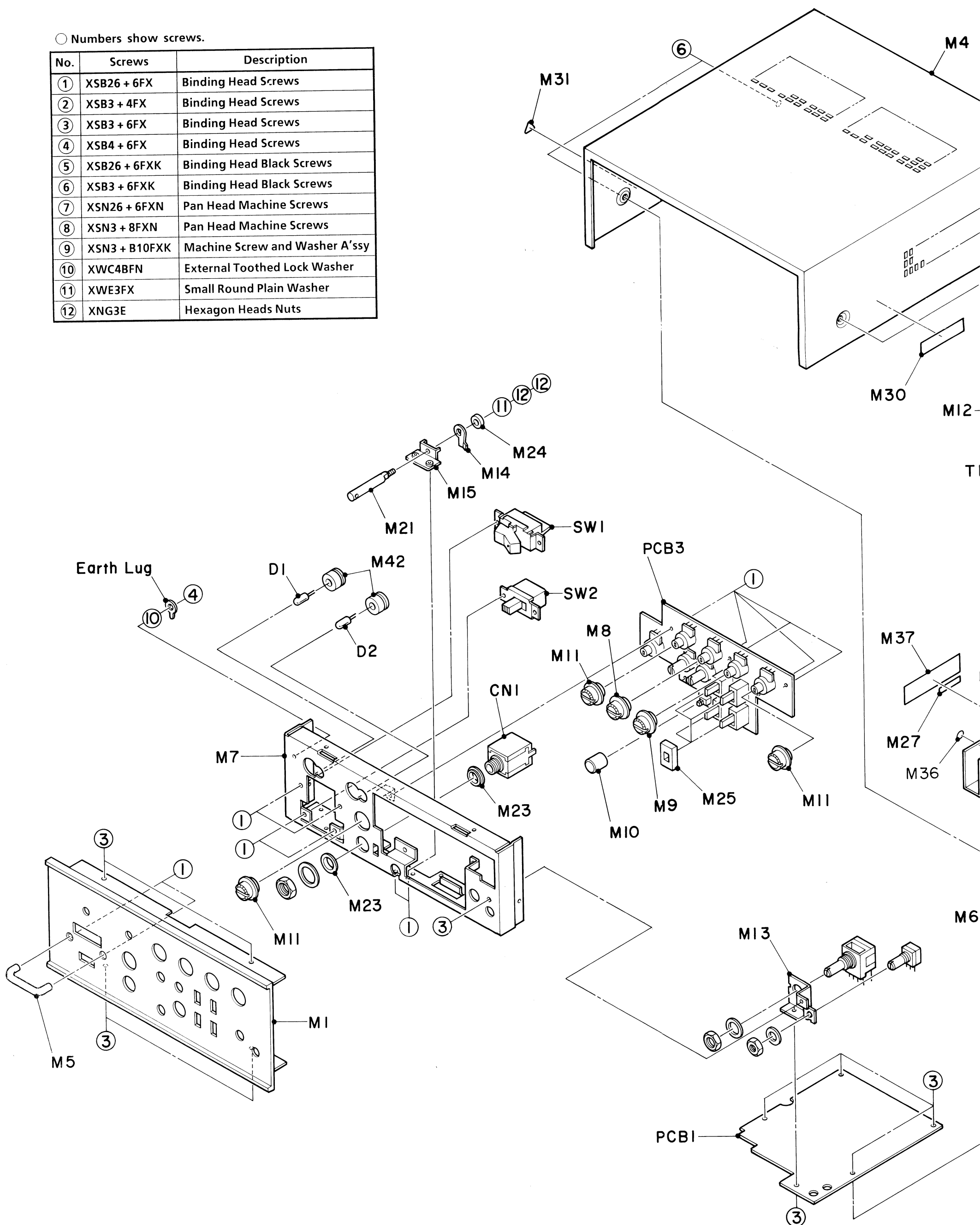
BUFFER BOARD

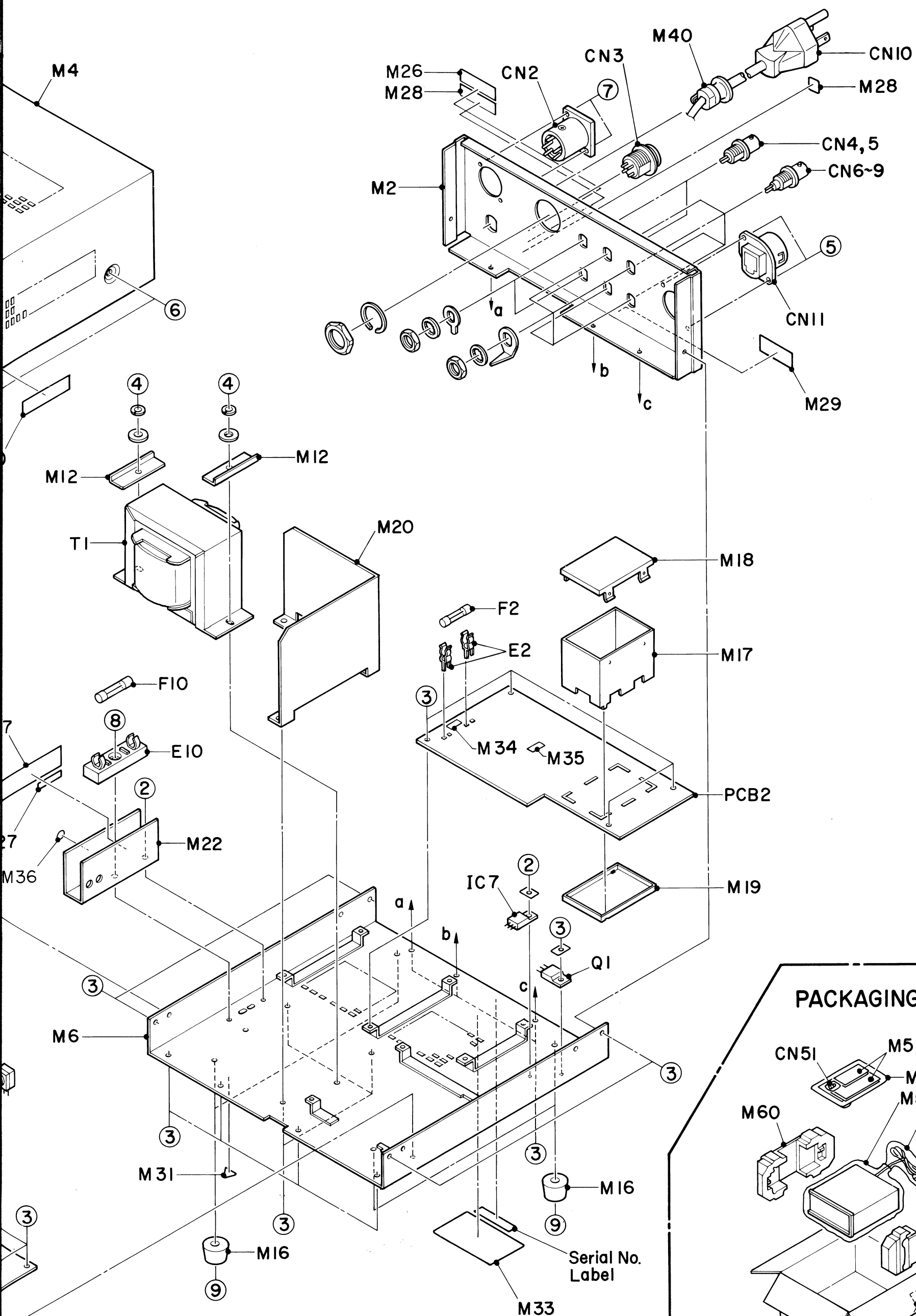
PCB1	o YFVKZ0Q39P1A	Printed Circuit Board Assy
IC1	AN78L05	IC
Q1-4	2SD636-Q	Transistor
R1	ERD10TJ222	Carbon 2.2K ohms 1/8W
R2	ERD10TJ103	Carbon 10K ohms 1/8W
R3	ERD10TJ274	Carbon 270K ohms 1/8W
R4	ERD10TJ562	Carbon 5.6K ohms 1/8W
R5	ERD10TJ103	Carbon 10K ohms 1/8W
R6	ERD10TJ272	Carbon 2.7K ohms 1/8W
R7	ERD10TJ822	Carbon 8.2K ohms 1/8W

SYMBOL NO.	PART NO.	DESCRIPTION	SYMBOL NO.	PART NO.	DESCRIPTION
R8	ERD10TJ224	Carbon 220K ohms 1/8W	ACCESSORY PARTS/PACKAGING PARTS		
R9	ERD10TJ392	Carbon 3.9K ohms 1/8W	M11	o YFV8QA1042AN	Operating Instruction
R10	ERD10TJ750	Carbon 75 ohms 1/8W	M12	VQA0120-3	Warranty Card
C1	ECEA1AU221	Electrolytic 220 μ F 6.3V	M13	YWS-EULRB01E	Service Center List
C2,3	ECEA0JJK100	Electrolytic 10 μ F 6.3V	M14	YWT20X20C03	Polyethylene Bag
CN1,2	EMCS0650Z	6 pin Jack Male	M16	o YFV9CA0849AN	Packaging
ACCESSORY PARTS/PACKAGING PARTS			10P-14P CONVERSION CABLE WV-CA11		
M15	o YFV8QA1064AN	Operating Instruction for NTSC	CN1	o SRCB6A16-14P	14 pin Connector
M16	o YFV8QA1065AN	Operating Instruction for PAL	CN2	o RM15TJ-10S	10 pin Connector
M17	VQA0120-3	Warranty Card			
M18	YWW22XPRB99K	Service Center List			
M19	YFV8SA0009CN	Safety Card			
M20	YWT20X25C03	Polyethylene Bag for Printed			
M21	YWT30X40C05	Polyethylene Bag for Mounting Bracket			
M22	o YFV9CA0865AN	Packaging for NTSC			
	o YFV9CA0866AN	Packaging for PAL			
	YWS-RB032	Packing Label			
STUDIO ZOOM LENS WV-LZ15/12					
MISCELLANEOUS					
SW1	o YF401614	Iris Switch			
CN1	o YF401610	20 pin Connector Cable Assy			
M1	YF401447	Hood Cap			
M2	YF401611	Hood			
M3	o YF401608	Focus Band			
M4	o YF121688	Macro Button			
M5	o YF616129	Zoom Lever			
M6	o YF616139	Coil Spring for Macro Button			
M7	o YF401613	Lens Assy			
M8	o YF401602	Iris Cover			
M9	o YFV7QA1126A4	Main Label			

○ Numbers show screws.

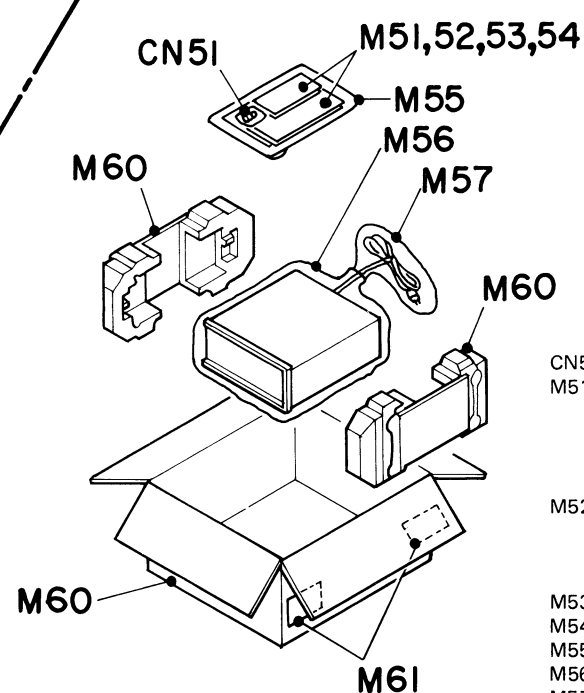
No.	Screws	Description
①	XSB26 + 6FX	Binding Head Screws
②	XSB3 + 4FX	Binding Head Screws
③	XSB3 + 6FX	Binding Head Screws
④	XSB4 + 6FX	Binding Head Screws
⑤	XSB26 + 6FXK	Binding Head Black Screws
⑥	XSB3 + 6FXK	Binding Head Black Screws
⑦	XSN26 + 6FXN	Pan Head Machine Screws
⑧	XSN3 + 8FXN	Pan Head Machine Screws
⑨	XSN3 + B10FXK	Machine Screw and Washer A'ssy
⑩	XWC4BFN	External Toothed Lock Washer
⑪	XWE3FX	Small Round Plain Washer
⑫	XNG3E	Hexagon Heads Nuts





PCB1	YFVKZRC35P1A
PCB2	YFVKZRC35E1A
PCB3	YFVKZRC35P2A
IC7	YFVKZRC35E2A
Q1	YFVKZRC35P3A
D1	AN6541
D2	2SB946-PQ
T1	LN21RPH
SW1	YFLN31GCP
SW2	YFPHB66V042
F10	EST1565T
CN1	ESD391T
CN2	XBA1F20NU100
CN3	YWU194-1-1
CN4,5	XLK-32F512
CN6-9	YFCNR-1204J
CN10	YFBNC-BRZ-1
CN11	YFRBS-11
E10	YWKP30SVT200
M1	YWHBS-3-08
M2	YWC0309-08F
M3	YWVM0309-08
M4	YWKPGTSA-3
M5	YFRC35-J12
M6	YWXN1157-03
M7	YFV5WA0286A3
M8	YFV5WB0286A3
M9	YFV5WA0287A3
M10	YFV5WB0287A3
M11	YFV5EA0387A2
M12	YFV5DA0005A4
M13	YFV2KA0147B2
M14	YFV2KA0148B3
M15	YFV5RB0004A4
M16	YFV5RC0004A4
M17	YFV6JA0036B4
M18	YWV3801HR01
M19	YFV2CA0117A4
M20	YFV2SA0254A4
M21	YWJ500PAM01
M22	YWJ500PAM02B
M23	YWL5R-10
M24	YFV2HA0399A4
M25	YFV2HA0400A4
M26	YFV2HA0401A4
M27	YFV2HA0402A3
M28	YFV4HA0011A4
M29	YFV2PA0167A4
M30	YWA620AER01
M31	YWJ500PWB01A
M32	YFV3AA0014A4
M33	YFV7MA0081A4
M34	YFV7MA0180A4
M35	YFV7MA0209A4
M36	YFV7MA0197A4
M37	YFV7MA0015A4
M38	YFV7MA0231A4
M39	YFV7MB0099A4
M40	YFV7MB0104A4
M41	YFV7MB0103A4
M42	YFV7QA1079B4
M43	YFV7QA1080B4
M44	YFV7QA1081B4
M45	YFV7QA1082B4
M46	YFV7QA1083B4
M47	YFV7QA1084B4
M48	YFV7QA1085B4
M49	YFV7MA0207A4
M50	YFV7MA0219A4
M51	YW-BCG-UR01B
M52	YWS-CULRB03
M53	YWS-CCSRB01
M54	YWSR5N4
M55	YWSR6N3-4
M56	YWSR6W-1
M57	YWJ800PWB01

PACKAGING



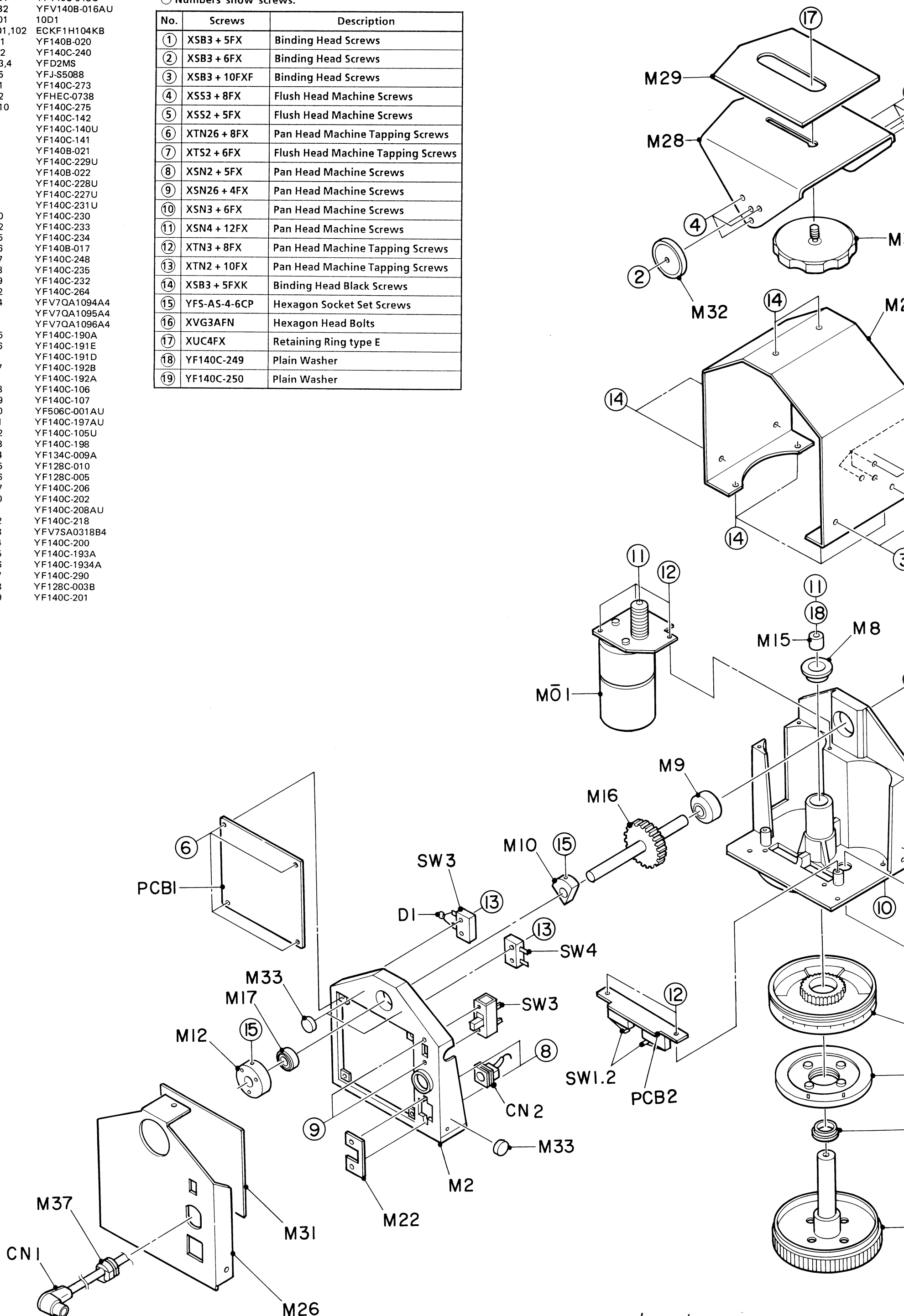
CN50	YFV8QA1045AN
M51	YFV8QA1046AN
M52	YFV8QA1047AN
M53	YFV8QA1050AN
M54	YFV8QA1090AN
M55	VQA0120-3
M56	VQA0054-5
M57	19998700419
M58	YFV8UA0004A4
M59	YWV22XPRB99K
M60	YFV8SA0009CN
M61	XZB26X40C05
M62	XZB35X50C05
M63	YWT20X35C03
M64	YFV9CA0852AN
M65	YFV9CA0903AN
M66	YFV9CA0904AN
M67	YWS-RB032

EXPLODED VIEW OF PAN/T

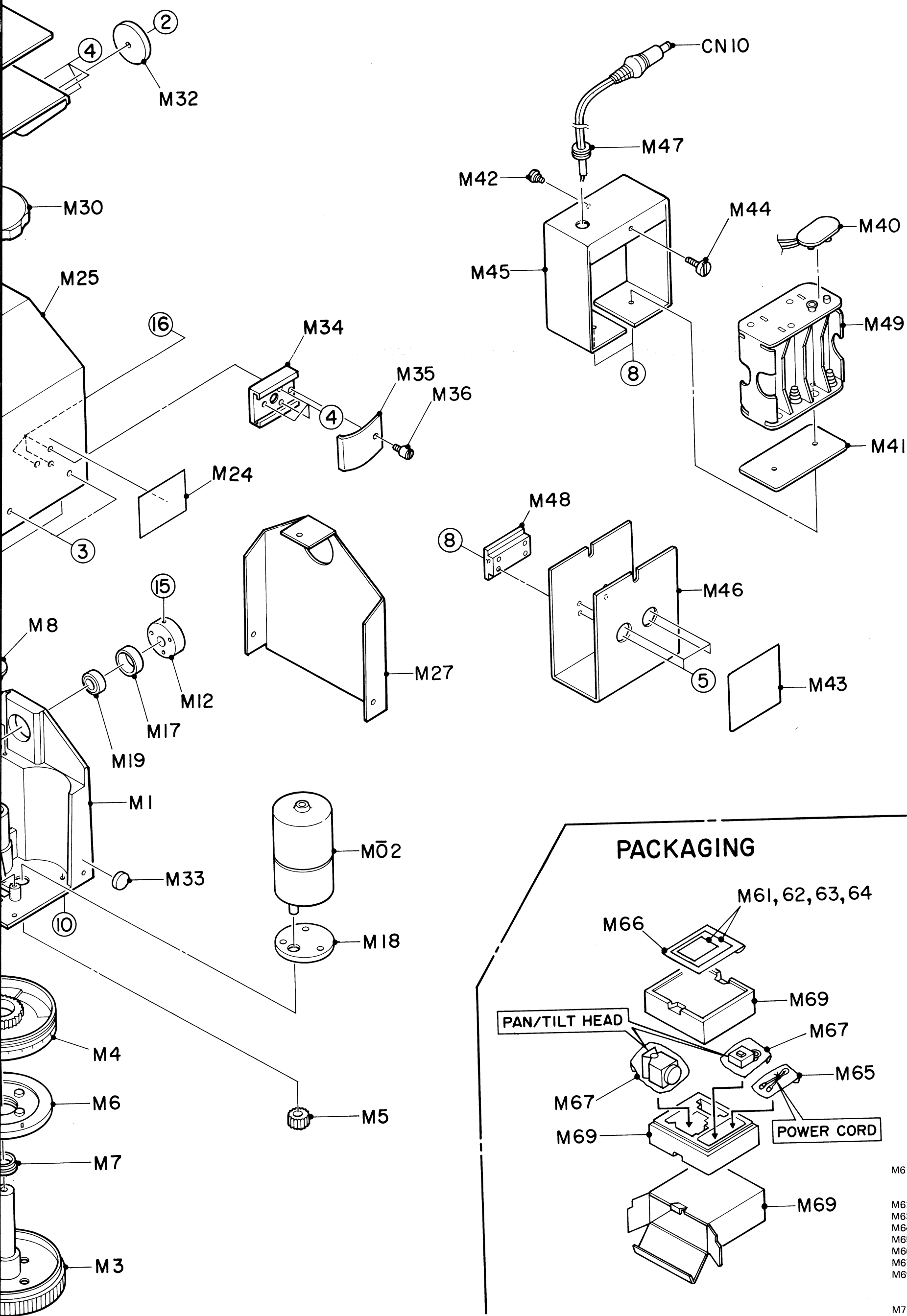
PCB1	YF140C-018U
PCB2	YFV140B-016AU
D101	10D1
C101,102	ECKF1H104KB
MO1	YF140B-020
MO2	YF140C-240
SW3,4	YFD2MS
SW5	YFJ-S5088
CN1	YF140C-273
CN2	YFHEC-0738
CN10	YF140C-275
M1	YF140C-142
M2	YF140C-140U
M3	YF140C-141
M4	YF140B-021
M5	YF140C-229U
M6	YF140B-022
M7	YF140C-228U
M8	YF140C-227U
M9	YF140C-231U
M10	YF140C-230
M12	YF140C-233
M15	YF140C-234
M16	YF140B-017
M17	YF140C-248
M18	YF140C-235
M19	YF140C-232
M22	YF140C-264
M24	YFV7QA1094A4
	YFV7QA1095A4
	YFV7QA1096A4
M25	YF140C-190A
M26	YF140C-191E
	YF140C-191D
M27	YF140C-192B
	YF140C-192A
M28	YF140C-106
M29	YF140C-107
M30	YF506C-001AU
M31	YF140C-197AU
M32	YF140C-105U
M33	YF140C-198
M34	YF134C-009A
M35	YF128C-010
M36	YF128C-005
M37	YF140C-206
M40	YF140C-202
M41	YF140C-208AU
M42	YF140C-218
M43	YFV7SA0318B4
M44	YF140C-200
M45	YF140C-193A
M46	YF140C-1934A
M47	YF140C-290
M48	YF128C-003B
M49	YF140C-201

○ Numbers show screws.

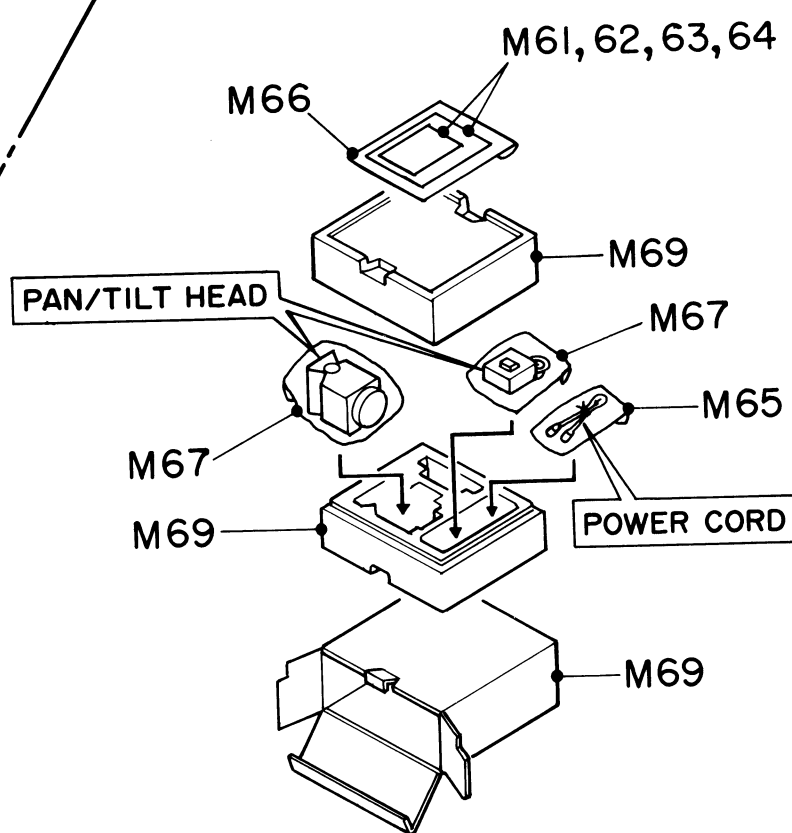
No.	Screws	Description
①	XSB3 + 5FX	Binding Head Screws
②	XSB3 + 6FX	Binding Head Screws
③	XSB3 + 10FXF	Binding Head Screws
④	XSS3 + 8FX	Flush Head Machine Screws
⑤	XSS2 + 5FX	Flush Head Machine Screws
⑥	XTN26 + 8FX	Pan Head Machine Tapping Screws
⑦	XTS2 + 6FX	Flush Head Machine Tapping Screws
⑧	XSN2 + 5FX	Pan Head Machine Screws
⑨	XSN26 + 4FX	Pan Head Machine Screws
⑩	XSN3 + 6FX	Pan Head Machine Screws
⑪	XSN4 + 12FX	Pan Head Machine Screws
⑫	XTN3 + 8FX	Pan Head Machine Tapping Screws
⑬	XTN2 + 10FX	Pan Head Machine Tapping Screws
⑭	XSB3 + 5FXK	Binding Head Black Screws
⑮	YF5-AS-4-6CP	Hexagon Socket Set Screws
⑯	XVG3AFN	Hexagon Head Bolts
⑰	XUC4FX	Retaining Ring type E
⑱	YF140C-249	Plain Washer
⑲	YF140C-250	Plain Washer



PAN/TILT HEAD (WV-PH10)



PACKAGING



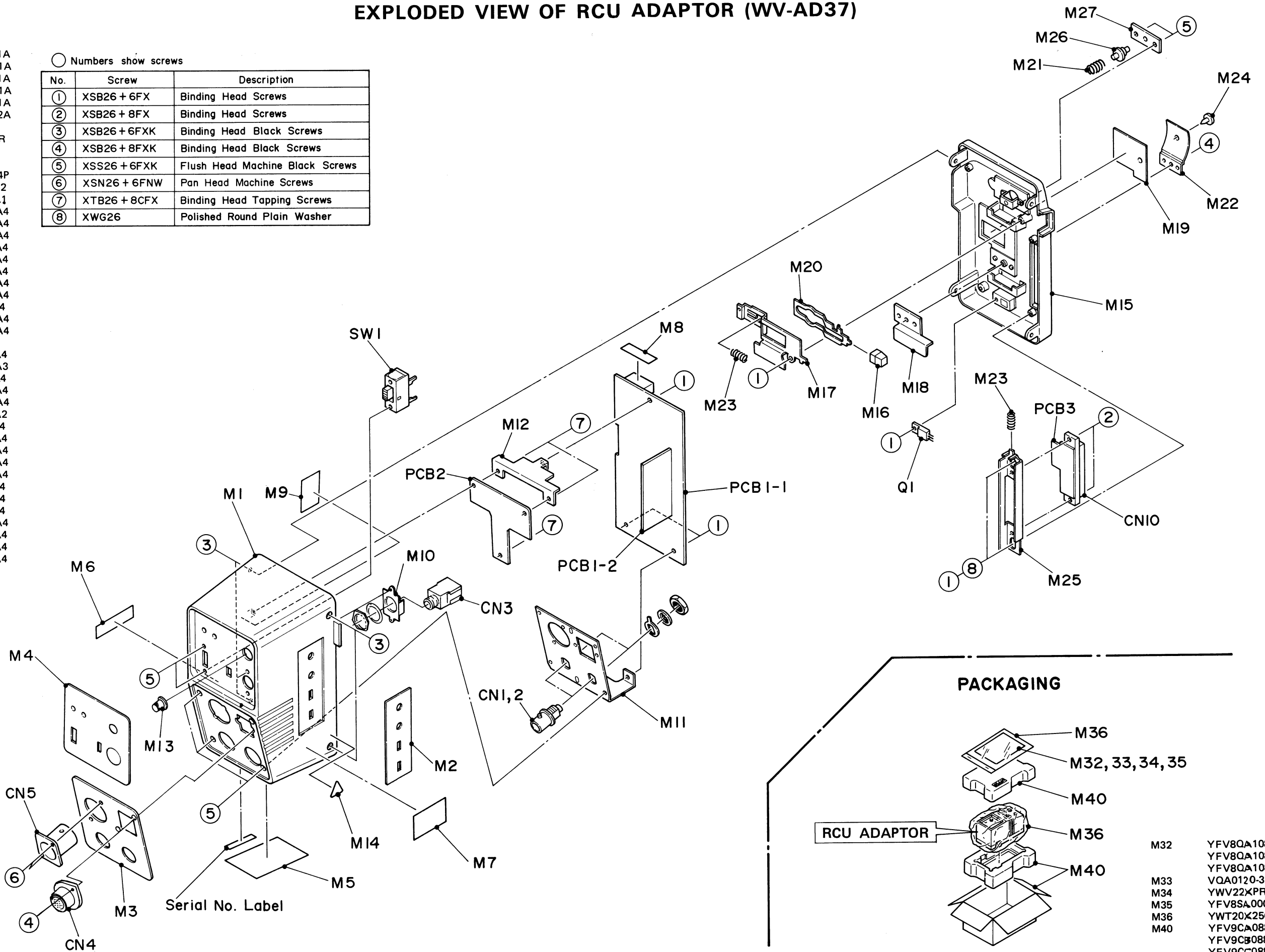
M61	YFV8QA1058AN
	YFV8QA1059AN
	YFV8QA1060AN
M62	VQA0120-3
M63	YFV8QA0009CN
M64	YFV8QA0009CN
M65	YWT15X25C03
M66	YWT23X30C03
M67	YWT23X34C03
M69	YFV9CA0861AN
	YFV9CA0862AN
	YFV9CA0872AN
M70	YWS-RB032

EXPLODED VIEW OF RCU ADAPTOR (WV-AD37)

PCB1-1	YFVKBAD37P1A
PCB1-2	YFVKBAD37E1A
PCB2	YFVKCAD37E1A
PCB3	YFVKZAD37P2A
Q21	2SC1398-QR
SW1	YFSSB022L6NR
CN1,2	YFBNC-BRZ-1
CN3	YWLJ194-1-1
CN4	YFAD37RCU14P
CN5	YFXLR432F512
M1	YFV5EA0379A1
M2	YFV5WA0281A4
M3	YFV5WA0279A4
M4	YFV5WA0280A4
M5	YFV7QA1075A4
	YFV7QA1102A4
	YFV7QA1103A4
M6	YFV7MA0106A4
	YFV7MA0099A4
M7	YFV7SA0169B4
M8	YFV7MA0162A4
	YFV7MA0219A4
M9	YWS-CCSRB01
M10	YFV3CA0071A4
M11	YFV2KA0145A3
M12	YFV2SA0251A4
M13	YFV5RA0048A4
M14	YFV7MA0103A4
M15	YFV5EA0383A2
M16	YFV6JA0012A4
M17	YFV2CA0114A4
M18	YFV6GA0049A4
M19	YFV6GA0050A4
M20	YFV4RA0009A4
M21	YFV4JA0084A4
M22	YFV4JA0130A4
M23	YFV4JA0131A4
M24	YFV5VA0045A4
M25	YFV2EA0045A4
M26	YFV5EA0406A4
M27	YFV2EA0046A4

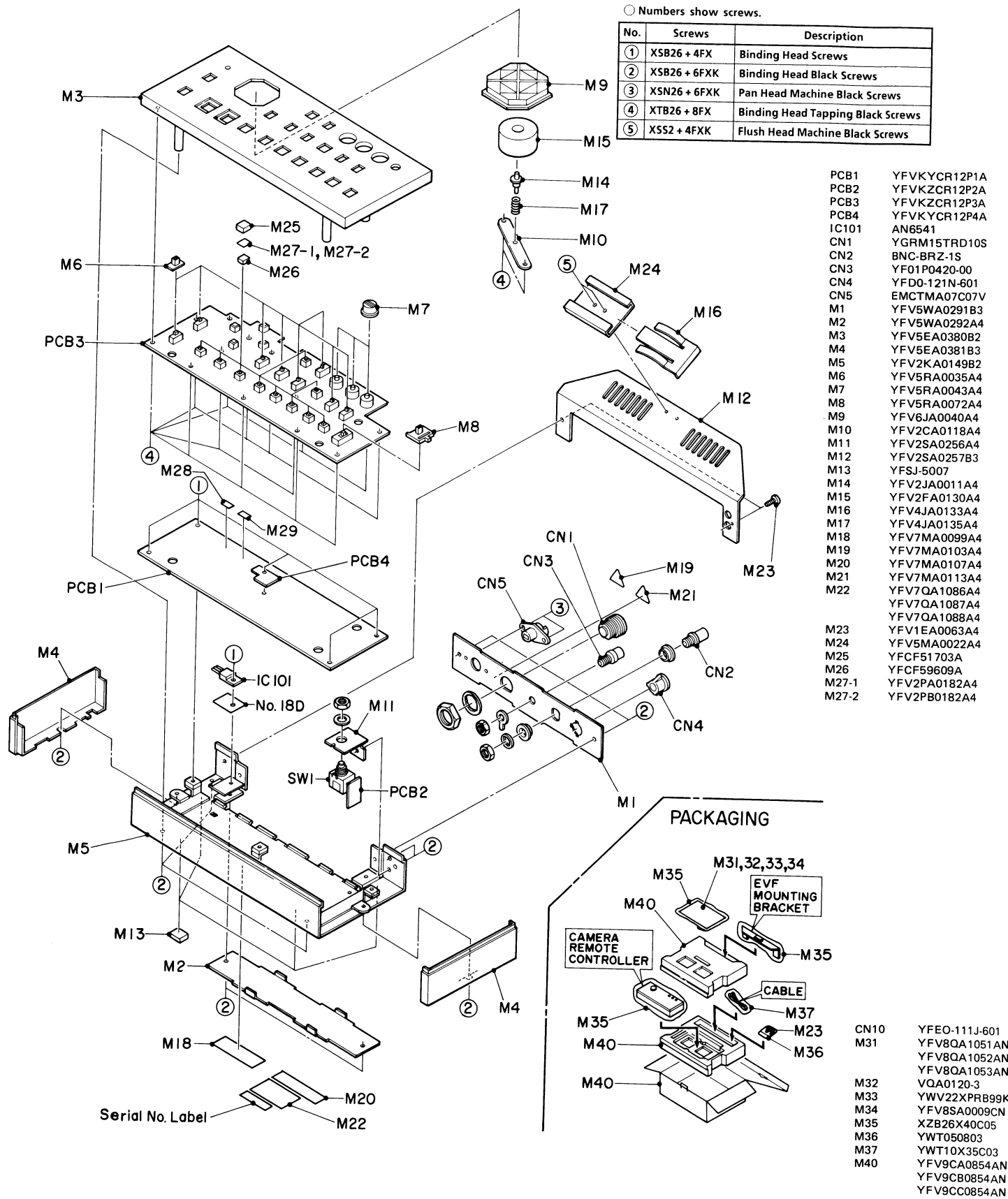
○ Numbers show screws

No.	Screw	Description
①	XSB26 + 6FX	Binding Head Screws
②	XSB26 + 8FX	Binding Head Screws
③	XSB26 + 6FXK	Binding Head Black Screws
④	XSB26 + 8FXK	Binding Head Black Screws
⑤	XSS26 + 6FXK	Flush Head Machine Black Screws
⑥	XSN26 + 6FNW	Pan Head Machine Screws
⑦	XTB26 + 8CFX	Binding Head Tapping Screws
⑧	XWG26	Polished Round Plain Washer

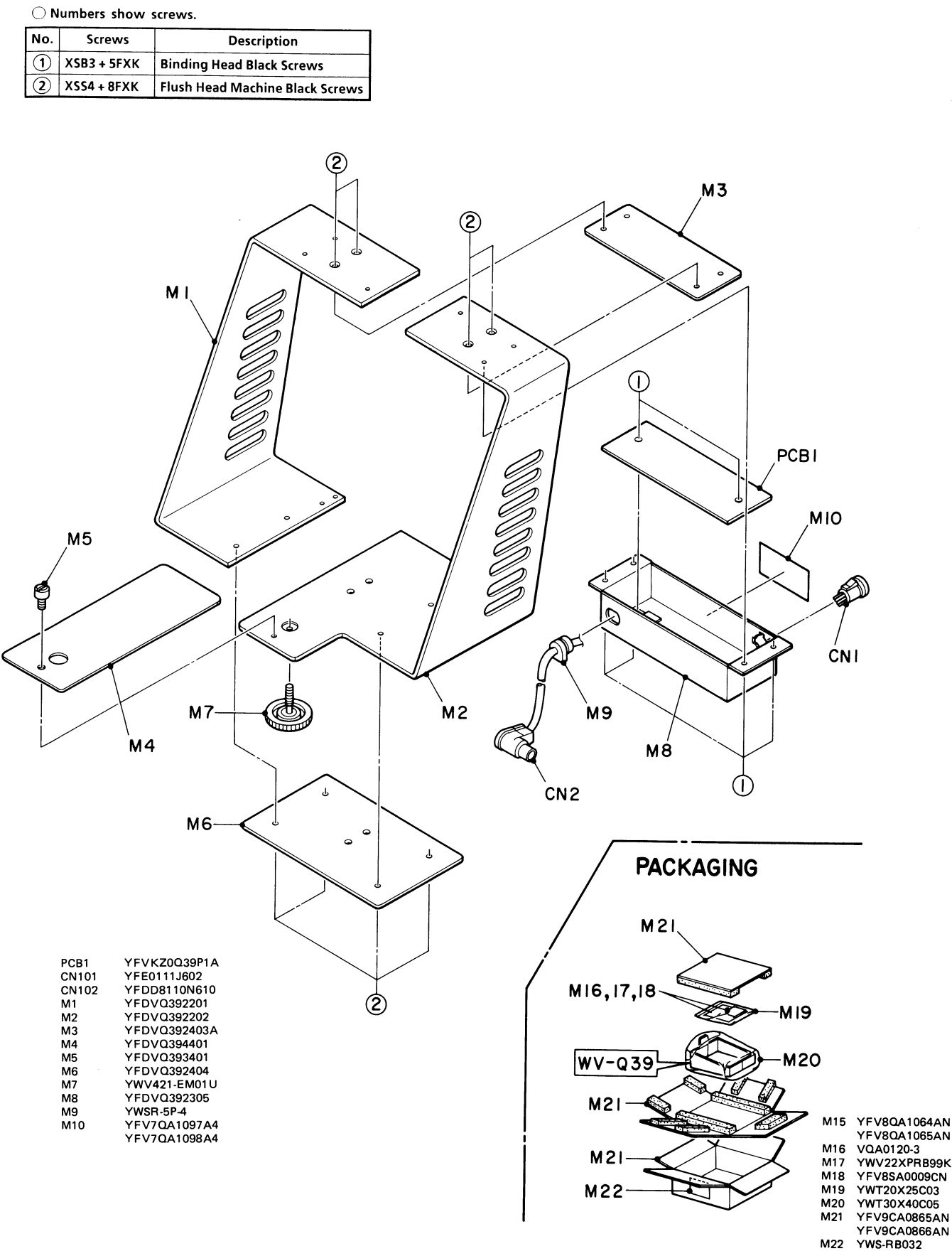


EXPLODED VIEW

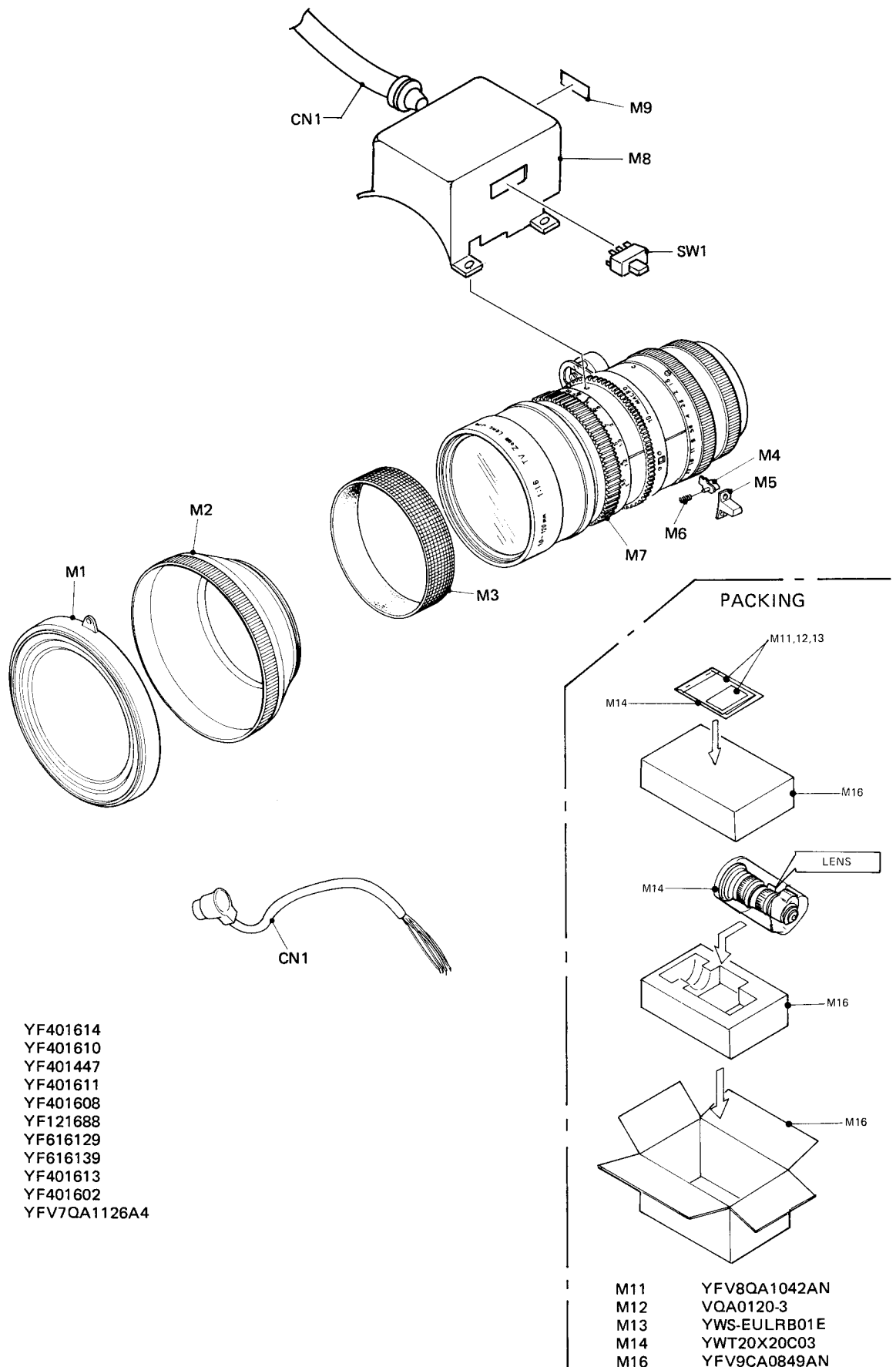
CAMERA REMOTE CONTROLLER (WV-CR12)



MOUNTING BRACKET (WV-Q39)



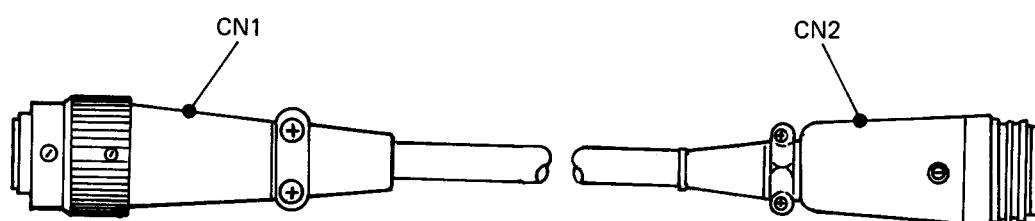
EXPLODED VIEW OF ZOOM LENS (WV-LZ15/12)



SW1	YF401614
CN1	YF401610
M1	YF401447
M2	YF401611
M3	YF401608
M4	YF121688
M5	YF616129
M6	YF616139
M7	YF401613
M8	YF401602
M9	YFV7QA1126A4

M11	YFV8QA1042AN
M12	VQA0120-3
M13	YWS-EULRB01E
M14	YWT20X20C03
M16	YFV9CA0849AN

EXPLODED VIEW OF CONVERSION CABLE (WV-CA11)



CN1	SRCB6A-16-14P
CN2	RM15TJ-10S